CLARK UNIVERSITY

The President's Report

1947 – 1948

BULLETIN NO. 186

CLARK UNIVERSITY BULLETIN—NO. 186 SEPTEMBER, 1948

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What are the plans for the future of Clark? This question has come to me so frequently from alumni and friends of the University that I have decided to deal with it in this second annual report.

When the inquiry is made more specific, it refers to two quite different, though related, topics. On the one hand there is the matter of the total educational policy, including the future of the Graduate School, the College, and of developments within individual departments. On the other hand, the question sometimes refers to the problem discussed by our Committee on University Needs, namely, the needs for increased funds and for improving the physical facilities. I shall discuss first the question of educational policy.

Educational Policy

At no institution is this problem more acute than at Clark. As I indicated in my inaugural address, the nature of Clark's history is unique in the annals of American higher education. Various stages of its development were marked by deliberate and even revolutionary changes. That this fact has made a deep impression is reflected in an interpretation of our history, frequently expressed by those acquainted with Clark, which runs as follows: in its early days, Clark specialized in psychology, and in its second period became a center of geography. It is inevitable that those who have this conception of our past are wondering what new emphasis is to be made with the coming of a new administration.

First of all, this historical interpretation requires serious modification. It is unquestionably true that the eminence of President Hall and his associates brought international fame to Clark in the field of psychology, and that later President Atwood and his staff performed a similar service with respect to geography. Nevertheless, to give exclusive attention to these acknowledged achievements of the University is to do an injustice to those scholars who were equally eminent in the physical sciences, in history, and in economics and sociology. Furthermore, to see our history only in terms of two great graduate departments obscures the fact that Clark's organization has for many years included one of the best liberal arts colleges in New England. These are some of the reasons for my suggesting that the common interpretation of our history needs to be criticized and modified. Nevertheless there is sufficient truth in this point of view to justify the persistent question—what next?

On the negative side, let me say emphatically that we are not planning any revolutionary change in the present structure, nor are we planning to discontinue any parts of our present organization in favor of something new. Stated positively, *it will be our policy to maintain and develop the essential character of Clark*. This policy is based upon the firm conviction that our present program is serving a valuable educational function. It is important, however, to note that we include the word "develop" as well as "maintain." It is certainly not our intention to remain static; but whatever changes we make will be in continuity with the past, and will be made in an evolutionary rather than in a revolutionary fashion.

The Graduate School

This general statement of policy can be clarified by pointing more specifically to the various aspects of our University organization. What does it mean, for example, to maintain and develop the essential character of our Graduate School? Clark has always been a fragment of a university in the sense that it has offered graduate work in only a few fields. In the fall of 1946, there were four departments which were accepting candidates for the Ph.D. degree. These were chemistry, geography, history and international relations, and psychology. Graduate work in economics had been temporarily suspended because several members of the staff were on leave of absence on war-related activities. Upon their return, this department was added to the list of those conducting Ph.D. programs. In addition, a particularly important function is served by the program leading to the degree of Master of Arts in Education. It is our intention to maintain graduate work in these fields at a high level. Faculty appointments during the past two years have been made for the purpose of strengthening the work for which there were already solid foundations. Promotion of graduate work in other fields will be postponed until we are sure that the work in existing departments has reached the highest possible level of performance.

It is clear, however, that no one of the existing graduate departments can flourish in complete isolation from other fields. For example, the health of chemistry depends in part upon such related disciplines as physics and mathematics. The other four departments have recognized their interdependence and are aware that the strength of one is enhanced by the solid support of all the others. The most obvious example of this is to be found in our divisional study of international affairs to which the departments of geography, history and international relations, and economics all contribute.

Another significant development in the Graduate School is the conscious attention now being given to the preparation of our graduate students for the profession of college teaching. In the past, all programs designed to serve this purpose have been departmental and for the most part have been entirely informal, depending upon the interest and aptitudes of individual members of the staff. Building upon this experience, we shall make the training of college teachers more specifically the responsibility of the Graduate School as a whole. In addition to giving formal and informal supervision to the teaching by graduate assistants or graduate fellows, we believe that future college teachers should be made more specifically aware of the nature of testing procedures now being used in colleges and that they should become literate with respect to the various theories of liberal education, the aims of higher education, and the problem of curriculum building in general education.

Concerning the Graduate School, then, we can summarize our policy by asserting that we are definitely committed to the maintenance of graduate studies in a few selected fields, that we recognize the interdependence of the departments offering graduate work, and that we shall make a more conscious effort to prepare our graduate students for the profession of college teaching.

The College

In order that there shall be no misunderstanding, I shall begin this part of the statement by making explicit what should be perfectly obvious to all. In all of our planning, the interests and the importance of the College will in no way be overshadowed by the Graduate School. These two parts of our organization are of equal importance and at no time will one be given precedence over the other. For example, this will be the case in all budgetary considerations. It will be true, also, in estimating the worth of the various members of our faculty. The function of teaching at the college level will be recognized as of equal worth with research and publication at the graduate level.

In making plans for the undergraduate program of education, there is one marked difference between the College and the Graduate School. As I have said, it is possible to have a fragment of a university where we concentrate our resources on a few selected fields. This is not possible in collegiate education. The central meaning of liberal education is that there shall be a well-balanced intellectual diet. We must be forever on our guard lest the acknowledged strength of a few graduate departments causes us to have high peaks and deep valleys in our undergraduate offerings. In pursuit of this policy, we have already met some of the more obvious deficiencies by increasing our offerings in such fields as government, sociology, the fine arts, and philosophy. Another phase of the contrast between graduate and undergraduate education is that the latter suffers from excessive departmentalization. It is becoming increasingly clear that the most pressing problems of our day cannot be solved by experts narrowly trained in small segments of knowledge. The effective leaders of the present and the future will be men and women equipped with the ability to appraise issues in the light of all relevant principles. This means that we must be sufficiently willing and imaginative to discover ways of bridging departmental lines in order that students may learn to face problems in their concrete wholeness.

Illustrations of the practical methods of achieving this goal through curricular arrangements are found in certain actions taken by the Academic Council during the past year. Under the chairmanship of Prof. H. M. Bosshard, a new course will be offered during the current year on Literature and the Nature of Man. Contributing to the organization and the actual instruction in this course will be members of the Ancient and Modern Language Departments and of the Department of English Literature. This course is not only a product of the humanities division as a whole but is designed to serve the interests of the general student rather than the interests of the student whose concentration is in literature or in one of the languages. The committee has announced that the literary works chosen for investigation are to be studied with a view of developing an area of knowledge and experience which educated men and women have in common with eminent creative artists of our Western civilization, and with a view of understanding basic human problems and humane attitudes that are both constructive and creative.

Other programs calling for the coöperation of two or more departments are to be found in three new areas of concentration. One of these is in the field of international relations, calling upon the resources of history, economics, and geography. A second is a carefully planned study of English history and literature, while the third is in the field of American civilization with the emphasis either on American arts and letters or on the problems of American society.

In discussing a policy for the College, one must go beyond the questions of curriculum. There is the total atmosphere, including extra-classroom activities, within which the students pursue their education. It is our intention to maintain the original spirit of the College, even though we have become conventional to the extent of abandoning the old three-year plan in favor of the four-year college course. We shall conduct the affairs of the College in such a way as to focus attention on the main business of education. This means the careful scrutiny of all those distractions which are so common on the average college campus. There is no intention, for example, of enlarging appreciably our participation in intercollegiate sports. We take particular pride in those activities of the students which are clearly contributing to their intellectual and social growth, such as dramatics, debating, and the affairs of the International Relations Club. At the same time we realize that education is not confined to the training of the intellect. There is an intimate relation between the mind and the emotions, and there is the social setting within which learning takes place. Thus we are becoming more alert to the total social environment of the campus and to the need of improving our counseling services. I point to the establishment during the past year of a Placement Office under the directorship of Associate Dean Victor B. Johnson. The work of this office is not merely that of finding positions for members of our student body. Rather it includes vocational counseling and the dissemination of information concerning the professions and other employment opportunities.

The Women's College

In this discussion of collegiate education, I have had in mind particularly what was originally called Clark College or the College for Men. Most of these things are relevant, nevertheless, to the undergraduate women. There is the further question as to whether there are peculiar needs of women which are not met by a program of studies designed particularly for men. Thus far we have made no attempt to create a new curriculum for the Women's College. In 1942 the facilities of the College, oriented toward education for men, were made available without change to women, and this has continued to be the practice to date. It is at least reasonable to believe that this is the best possible education for our women students. We have not been content, however, to accept this conclusion without serious thought and investigation. During the past year, therefore, a committee of the Advisory Board of the Women's College, headed by Mrs. Thomas F. Power, studied this problem and presented a report which merits serious consideration. I cannot repeat here the detailed recommendations contained in the report but I can convey its spirit through the following passages:

"We are convinced that Clark should continue to offer in the Women's Division a Liberal Arts Education, but that the courses offered should bear a concrete relation to the conditions of daily living and responsibilities of women as active participating citizens in the local community and in world affairs.

"The startling rise in the divorce rate; the nation's eight billion dollar annual liquor bill as compared to three billion dollars expended for education; the alarming increase in juvenile delinquency, which is reaching down into age groups hitherto not associated with major crime and up into social strata where in the past well-organized family life and sound religious training precluded contact with vice or degeneracy—all make the reëstablishment of the dignity and authority of the American home both the paramount social obligation and the most challenging opportunity for service for the college-trained woman in the world today.

"It, therefore, follows that the most important function for woman in the contemporary world is that of wife and mother and that her college education should give concrete emphasis to the problems she will face in that capacity—both in her home and her community.

"We are sufficiently realistic to recognize that not all college women choose or are chosen to be wives and mothers, but we know that every college woman, whether she marries or whether she enters the professional fields of law, medicine, teaching, nursing or social service, diplomacy or engineering, or pursues some business career, deals with the human product of the home and should be qualified to deal with it intelligently and constructively.

"Let it not be supposed, however, that because we say woman's most important function is as wife and mother that we advocate circumscribing her activities or are minimizing her importance in the social scheme. On the contrary, since the problems encountered in dealing with the personalities, interests and activities of her husband and children are in miniature the problems of the social order in general, the intelligent and resourceful handling of these problems vastly broadens her influence and widens the scope of her activities.

"The essence of the college woman's training must, therefore, be the understanding of the basic elements involved in working with, for and through people, either as individuals or groups to attain those goals and ideals involved in reëstablishing the stability and dignity of the home, in arousing the civic consciousness of the community and developing new techniques for restoring harmony in this internationally troubled world.

"We would, therefore, have the Women's Division of Clark University offer to its students a curriculum in the Liberal Arts tradition, but with an openly avowed and well-articulated emphasis on *Human Relations*."

Division of Business Administration

Another part of the University program of fairly recent origin is the Division of Business Administration. Experience thus far clearly indicates that we should continue this program. Since it is not a separate school but a division within the College, we shall maintain academic standards comparable to those of the liberal arts college and shall work toward a clearer definition of its place and function within our total structure. While assuming full responsibility for the educational program, we do wish to have advice from representative leaders in the business community. With this in mind, we have recently appointed an advisory committee to work with Prof. Arthur F. Lucas, director of the division. The personnel of the committee is as follows: Carl R. Brownell of G. L. Brownell, Inc.; Donald W. Campbell, Treasurer of the State Mutual Life Assurance Company; F. Harold Daniels, President of Riley Stoker Corporation; C. Lane Goss, President of the Worcester County Institution for Savings; Ralph F. Gow, Executive Vice President of Norton Company; Wallace T. Montague, Vice President of Norton Company; Albert Palmer, Vice President of Crompton & Knowles Loom Works; Jacob Reed of Reed & Company; and George Avery White, President of the State Mutual Life Assurance Company.

Adult Education

Finally, our plans for the future must not exclude the possibilities of adult education. Clark should learn to take advantage of its location in the midst of an industrial city and also to meet the responsibility which that location entails. During the past year a committee of the faculty, under the chairmanship of Prof. John E. Bell, started a systematic study of the needs of the Worcester community and the contribution which Clark can make in meeting those needs. It is also true that the good fortune of our location may serve to vitalize the education of our full-time students. By and large, practical experience in a work-a-day world, unguided by general principles, yields little in the way of educational values. At the same time, the classroom always runs the danger of becoming an ivory tower. Sound educational practice should provide for the vital interpenetration of the academic program on the one hand and the living scientific, industrial, social and artistic movements within society on the other hand. Clark should take advantage of its position to accomplish this end.

In this discussion of general educational problems, I have tried to give illustrations by reference to the various segments of the University organization. It should be added that an equally important part of our task is that of building all of these parts into a unified educational system. We are sufficiently small and intend to remain sufficiently small to have a genuine community. A community, however, is not achieved merely by the advantage of smallness. There must be an actual sharing of responsibility and a sharing of purposes. Among the purposes shared by all of us is that whatever changes are made shall be dictated by the primary concern for the instructional work of the institution. This will take precedence over matters of physical equipment and administrative machinery. We recognize, of course, that adequate physical equipment is necessary as an instrument to the primary educational task. We also recognize that administrative facilities may be limited to a point which endangers the most efficient operation of the educational system. An unusually wise appraisal of this problem is contained in a recent report by President John Nason of Swarthmore College. Having noted the tendency for small as well as large institutions to become increasingly complex, with the inevitable addition of administrative duties, he says: "This is unfortunate in two respects, though I fear it is unavoidable. It adds to the cost of administration, and it tends to push the administrators farther away from the role of teachers into the role of executives. The nineteenth century maxim of the less government, the better, is applicable to colleges and universities. Academic administration is a kind of necessary evil which exists only for the convenience of teachers and students, and the less spent on it the more money is available for the central activity of teaching and learning. There would seem to be a point, however, where too little government impedes rather than advances the good of the whole, and I am reluctantly forced to the conclusion that the older pattern of college administration is inadequate to deal satisfactorily with present conditions and needs. If this is correct, it means unfortunately more people involved in administration and more money spent on it." Recognizing the truth of this analysis, I repeat that it is still our policy to subordinate the physical plant and educational administration to the primary task of instruction.

UNIVERSITY NEEDS

The second part of the general question concerning future plans of the University is directed toward the problem of financial and physical needs. After more than a year of study and discussion, the Committee on University Needs arrived at some conclusions concerning those which are most pressing. I shall not reproduce here the full report of that committee but shall indicate the directions toward which the report pointed. In line with the general educational policy, the first and most important need is for adequate funds with which to support the instructional work of the University. In the first place, the salary scale of the faculty must be improved. Salary increases during the past few years have been of some help but they have fallen far short of the increase in the cost of living. We must face, too, the realities of a competitive market in the academic world. If we really mean to base our greatness on the quality of the faculty, we must be in a position to compete effectively not only with the best of the colleges but with those universities which, like Clark, maintain graduate departments. The other reason for seeking new instructional funds is that we should like to improve the student-teacher ratio. In other words, we wish to increase the total size of the faculty and also raise the salaries of our present faculty.

A second need which is becoming increasingly apparent has to do with scholarship funds for students who come to us from outside the city of Worcester. Through the generosity of some citizens of Worcester, we have available adequate scholarship funds for Worcester students but we have none for those who come from away. Year in and year out we receive applications from students with excellent qualifications who are unable to follow through on their desire to study at Clark because we are unable to give them financial assistance. A related need has to do with graduate students. We need the work of graduate students as assistants in their respective departments but find ourselves unable to pay adequate stipends for this service. Funds available for graduate scholarships and fellowships are also pitifully inadequate for these days.

As regards physical needs, there are a few things which take precedence over everything else. After careful study and investigation, we have concurred in the judgment of those who several years ago felt that a modern science building has top priority in our list of needs. This is required not only to give the occupants of our present Science Building—physics and chemistry—the proper laboratories and classrooms with which to carry on their work but also to provide much-needed space for biology and geology. Indeed, the construction of a science building would relieve the incredibly crowded conditions of Clark Hall. By releasing the space now used by biology and geology, we should be able to remodel Clark Hall in such a way as to provide the needed facilities for faculty and administrative offices and classrooms.

Of equal importance is the provision of a student center. In our statement of general policy, we pointed to the fact that education is not confined to the training of the intellect and that it is necessary to provide the proper social setting within which the educational process takes place. At present we have no adequate college home, either for our dormitory students or for the residents of Worcester. A student center or student union building would provide this home and provide facilities for constructive and creative student activities.

While there are other things which might be desirable and toward which we might work in the future, it seems to us that the needs here listed are the ones which should be met as soon as possible.

RESEARCH

Research projects carried on in the graduate departments have been reported by various members of the staff in papers delivered at meetings of their respective professional societies. There are two projects involving graduate students as well as faculty which call for particular notice. Students in the Graduate School of Geography, and former students in the School, are working on a project under the directorship of Prof. Samuel Van Valkenburg preparing several hundred large isothermal maps in color for the United States War Department. These maps will make it possible to determine with a new degree of accuracy the average temperatures, precipitations, and variations in temperature in all parts of the world.

Graduate students in the Department of Chemistry are working under the direction of Prof. Donald MacGillavry on a project sponsored by the United States Navy, Office of Naval Research. It is a study of metals in contact with salt solutions and will involve the measurement of electric potentials, requiring the development of new precision measuring instruments.

FACULTY CHANGES

Changes in faculty personnel are here listed according to departments.

In Mathematics, Prof. Carey E. Melville, chairman of the department, retired on August 31 of this year. Prof. Melville first came to Clark University in 1906 for the purpose of continuing his graduate studies in the field of mathematics. Immediately he was pressed into service as Assistant in Mathematics. In 1909 he was appointed an Instructor; Assistant Professor in 1911, Associate Professor in 1918; and later Professor and Chairman of the Department of Mathematics. In addition to his teaching, he served ably as Registrar from 1914 to 1932. On September 1 of this year he became Professor Emeritus. Professor Melville's successor as Professor of Mathematics and chairman of the department is Charles T. Bumer who comes to Clark from the Instrumentation Laboratory at Massachusetts Institute of Technology.

In the Department of Biology, John H. Blair has been appointed Assistant Professor of Physiology. During the past year this post was filled by Fred Howard, M.D., who has accepted a post at Massachusetts General Hospital.

Several changes have been made in the Department of Psychology and Education. A year ago we were forced to make hurried arrangements for the work in psychology because of the resignations of Prof. Roger G. Barker and Prof. Robert H. Brown. We were fortunate indeed to have secured the services during that year of

Clarence V. Hudgins, psychologist at the Clark School for the Deaf at Northampton, on a part-time basis and of Sigmund Koch of Duke University as Visiting Associate Professor. Both were stimulating teachers and effective members of the department during their year with us. Appointments for the current year include Seymour Wapner and Thelma G. Alper, both of whom have been appointed to the rank of Associate Professor. Mr. Wapner will have primary responsibility for the psychology laboratories and the experimental work while Mrs. Alper's chief responsibility will be in the field of clinical psychology. Mr. George F. Mahl of Yale University is serving as Visiting Lecturer, giving a graduate course in learning. David Lane, who has assumed the post of Associate Director of the Veterans Guidance Center at the University, will also be attached to the Department of Psychology and Education (Division of Education) as Assistant Professor.

Prof. Samuel J. Brandenburg has asked to be relieved of his duties as chairman of the Department of Economics and Sociology although he remains active as a faculty member. Prof. James A. Maxwell, a member of the faculty since 1924, has been appointed as chairman of the department. Also in this department we record with regret the resignation of Franklin P. Hall to become Professor of Economics at Connecticut College. In accepting this appointment, he takes the place of the late Hartley W. Cross who received his Master's degree at Clark in 1924 and his doctorate in 1929. Replacing Mr. Hall is Sheldon Schaffer who has been appointed Instructor in Economics. Also Mr. H. A. John Green of Oxford University will be a member of this department during the present year as Visiting Lecturer in International Economics.

In Romance Languages, Theodore Nicol, who served as Visiting Professor, has now been made a member of the staff as Associate Professor. Miss Loretta Wawrzyniak, instructor for the past two years, resigned to accept a similar position at the University of Oregon and also to continue her graduate studies. Appointed to Assistant Professorship in this department is Walter A. Ramsey.

Mr. Philip M. Palmer of the German Department has been granted a one-year leave of absence to serve as Visiting Associate Professor at the University of California. Replacing him for the year as Instructor in German is Werner Loewy.

Robert N. Beck has been appointed Instructor in Philosophy and Roland C. Lambert has been added to the Physical Education staff as Assistant Director.

In the Women's College, Miss Katharine Reed, who last year combined the duties of Assistant to Miss Hughes in Physical Education and Housemother at Woodland House, will this year devote her entire time to assisting Miss Hughes. Mrs. Leslie Leland has been appointed Housemother to replace her.

The following have been promoted from Assistant Professor to Associate Professor: George E. Hargest in Economics and Business Administration; J. Richard Reid in Romance Languages; and Henry J. Warman in Geography.

Buildings and Grounds

During the past few years there has been a systematic renovation of all classrooms and laboratories, particularly in Clark Hall and in the Science Building. Work on the biology laboratories was completed a year ago and the most recent remodeling has taken place in the psychological laboratories. The work has proceeded according to carefully conceived plans which are designed to improve both instruction and research.

For the past two years it has become evident that the operation of the University bookstore, originally designed for a student body less than half the size of the present one, was falling somewhat short of serving efficiently the needs of the enlarged University. During recent weeks the store itself has been remodeled, and for the first time in the history of the University it has a full-time manager. Mr. Patrick V. Sheehan has taken on this responsibility.

The Board of Trustees

The University suffered a great loss in the sudden death of Leon E. Felton on March 5, 1948. The sense of loss shared by Clark people everywhere has been well expressed by Mr. George H. Mirick and Mr. Archibald M. Hillman, members of the Board of Trustees and also classmates of Mr. Felton. They wrote of him as follows: "A graduate of the College in the Class of 1907, an active and enthusiastic member of the Alumni Association, Mr. Felton was elected to the Board of Trustees on March 28, 1931. Subsequently he was chosen Secretary of the Board, which office he filled with signal honor until his death on March 5, 1948. Ever mindful of his trust, notable were his contributions to the welfare and progress of this University which he loved so well. His aid, counsel and service were eagerly sought on innumerable occasions, not only by his Board associates but by the President and Faculty, students and alumni as well. Never failing was his response. We shall sadly miss his generous, capable and faithful service to the University."

Dr. Thomas L. Patterson of Detroit has completed his four years as Alumni Trustee and is succeeded by Mr. Hiram N. Rasely of Belmont.

Commencements

On May 23, the Baccalaureate Service was held in Atwood Hall at ten o'clock and the fifty-eighth annual Commencement was held at four o'clock. Reverend Herbert Gezork of Andover Newton Theological School preached the Baccalaureate sermon and the Commencement address was delivered by the Honorable Christian A.

Herter, Representative from Massachusetts to the Congress of the United States. The following degrees were conferred at the Commencement exercises: Bachelor of Education, 1; Bachelor of Business Administration, 20; Bachelor of Arts, 107; Master of Arts in Education, 9; Master of Arts, 21; Doctor of Philosophy, 7.

At the graduation exercises held at the close of the summer session on August 27, the President delivered the Commencement address and the following degrees were conferred: Bachelor of Education, 2; Bachelor of Business Administration, 10; Bachelor of Arts, 41; Master of Arts, 16; Doctor of Philosophy, 2.

Howard B. Jefferson

September, 1948

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OPPORTUNITIES IN GEOGRAPHY

IT IS no longer necessary to defend geography as a field for graduate training. Geography is now accepted as a valuable subject in school and college education, leading to better citizenship and world understanding. Preparation for teaching has been the chief function of graduate training; there is no reason to expect that demand for teachers will decline. However, another outlet for geographers has been opened and may eventually become of paramount importance. Through the stimulus of war, when most geographers were mobilized for national defense, the value of geographic research and approach to political and strategical problems has been discovered; the possibilities for expansion in that direction are almost unlimited. Cooperation among branches of federal, state and municipal governments have resulted in positions which geographers now fill most successfully; private concerns also are gradually awakening to the role geography could play in their enterprises. In these years of world instability geography will demonstrate that it deserves an important place in reorganizing relationships among people of the world, and creating a basis for mutual cooperation. To be a geographer will offer more and more opportunity to be of service to mankind.

Samuel Van Valkenburg
Director, Graduate School of Geography
Clark University

ADVANTAGES AT CLARK
FOR
GEOGRAPHIC TRAINING

THE Clark Graduate School of Geography, founded in 1921 by Dr. Wallace W. Atwood, offers the following advantages for geographic training:

1. A well-rounded staff, covering the various fields of geography.
2. Frequent lecturers from home and abroad as well as visiting professors and many foreign students stimulate the atmosphere of the workroom. In 1948-49, from a total of 52, twelve students were from abroad and eighteen different states were represented.
3. A limited number of carefully selected students.
4. Scholarships, fellowships, and teaching fellowships.
5. An excellent library and map collection.
6. A student workroom which has developed into the core of geographic life.
7. An M.A. degree with emphasis on basic training. A Ph.D. degree based on specialization after that basic background has been obtained.
8. Emphasis on field work. The Clark Field Camp always starts the academic year.
9. A friendly atmosphere between staff and students—frequent conferences, formal and informal.
10. Emphasis on the placing of students (in teaching positions as well as in research) who have finished their training.
11. Cooperative research projects with governmental agencies and communities.
12. A continued interest after the student has left the school.

GRADUATE WORK, SCHOOL OF GEOGRAPHY

CANDIDATES for the master's degree are required to pass written examinations in at least six of the following fields: physiography, climatology, soils and land utilization, plant geography, economic geography, human and cultural geography, political geography, and regional geography. The oral examination for the master's degree covers four fields approved by the staff. An acceptable thesis is then required. The master's degree usually takes two years except for those whose preparation has been adequate enough in fundamentals to enable them to qualify in less time.

Candidates for the doctor's degree in geography will pass written examinations in the above fields, and a general oral examination covering six major fields approved by the staff. In general, a year of work beyond the Master's degree should prepare a candidate for the general examination preliminary to his acceptance as a candidate for the doctor's degree and to his concentration work for his dissertation.

A prospective candidate for the doctor's degree is advised to prepare himself early for the examinations in the reading of modern foreign languages. French and German are required except in cases where the Graduate Board may authorize the substitution of another language for French. A student must pass the foreign language examinations before he will be permitted to take the preliminary examination for the degree of Doctor of Philosophy. These examinations are conducted by a committee composed of representatives of the modern language departments and the Geography School.

The final examination is essentially a defense of the dissertation, although at the discretion of the examining committee, the candidate may be questioned on the entire field of his study.

GRADUATE COURSES OFFERED

Regional Climatology (2 semesters, yearly).
Dr. Van Valkenburg

Soils Geography (1 semester, alternate years).
Dr. Ekblaw

Land Utilization and Planning (1 semester, alternate years).
Dr. Ekblaw

Biogeography (1 semester, alternate years).
Dr. Ekblaw

Life Zones and Regions (1 semester, alternate years).
Dr. Ekblaw

Problems in Economic Geography (2 semesters, yearly).
Dr. Murphy

Urban Geography (1 semester, yearly).
Dr. Murphy

Historical Background of Geography (1st semester, yearly).
Dr. Van Valkenburg and Dr. Ekblaw

Regional Physiography of the Western Hemisphere (2 semesters, alternate years).
Dr. Lougee

Regional Physiography of the Eastern Hemisphere (2 semesters, alternate years).
Dr. Lougee

Geography of Middle America (1 semester, yearly).
Dr. Warman

Geography of South America (1 semester, yearly).
Dr. Warman

Graduate Courses (Continued)

Geography of Eurasia (2 semesters, alternate years).
Dr. Van Valkenburg

Geography of Pacific Area (1 semester, yearly).
Dr. Murphy

Field Methods and Studies (1 semester, yearly).
The Staff

Human Geography (1 semester, yearly).
Dr. Ekblaw

Cultural Geography (1 semester, yearly).
Dr. Ekblaw

Political Geography (2 semesters, yearly).
Dr. Van Valkenburg

Geography in Education (1 semester, alternate years).
Dr. Warman

Oceanography (1 semester, yearly).
Visiting Professors, Wood's Hole Oceanographic Inst.

Cartography (2 semesters, yearly).
Mr. Burnham

Cartographic Presentation of the Geographical Landscape (2 semesters, yearly).

Visiting Professor Dr. Raisz

Research Courses are arranged in All Fields.
The Staff

Seminars, General and for Ph.D. Candidates.
The Staff

Undergraduate courses in Meteorology, Principles of Geography, and Economic Geography can be taken if background is inadequate.

MEMBERS OF THE STAFF

SAMUEL VAN VALKENBURG, Ph.D., University of Zurich, Political Geography and Climatology, Professor and Director.

W. ELMER EKBLAW, Ph.D., Clark University, Anthropogeography and Biogeography, Professor.

RAYMOND E. MURPHY, Ph.D., University of Wisconsin, Economic Geography and The Pacific Area, Professor.

HENRY J. WARMAN, Ph.D., Clark University, Geography in Education and Latin America, Associate Professor.

RICHARD J. LOUGEE, Ph.D., Columbia University, Physiography, Associate Professor.

GUY H. BURNHAM, M.A., Clark University, Cartography, Instructor.

Part Time

ERWIN RAISZ, Ph.D., Columbia University, Institute of Geographical Exploration, Harvard University, Advanced Cartography.

JOHN C. AYERS, Ph.D., Duke University, Wood's Hole Oceanographic Institute, Oceanography.

HARRY J. TURNER, M.A., Yale University, Wood's Hole Oceanographic Institute, Oceanography.

Visiting Professors (1948-1949)

HANS BOESCH, Ph.D., Chairman, Department of Geography, University of Zurich, Switzerland.

WALLACE W. ATWOOD, JR., Ph.D., Deputy Secretary, Committee on Geophysics and Geography, Research and Development Board, Washington, D. C.

SIDMAN POOLE, Ph.D., Head, School of Geography, University of Virginia, Charlottesville, Virginia.

ARTHUR B. BEAUMONT, Ph.D., Specialist in Soil Conservation, University of Massachusetts, Amherst, Massachusetts.

ADMISSION TO THE GRADUATE SCHOOL OF GEOGRAPHY

A PROSPECTIVE applicant should communicate with the Graduate School of Geography. He will receive the application blanks and should submit them to the Director with an official transcript of undergraduate work, and graduate work, if any. Letters of recommendation from at least two persons who are competent to judge his qualifications, and a recent photograph (passport size preferred) should support the application.

In addition, applicants for admission to the Graduate School are strongly urged, and may be required, to submit a record of attainment in the Graduate Record Examination. This examination tests general knowledge in the fields of study covered by the curriculum in the liberal arts college, and requires no special preparation. It is useful as an indication of the general preparation of the student, and as a guide in planning his course of study.

Admission is granted only by the Graduate Board of the University on recommendation by the Staff of the Clark School of Geography.

Scholarships and Fellowships are available for qualified prospective candidates for the degrees of Master of Arts and Doctor of Philosophy respectively. Application for a scholarship or fellowship should be made before March first to the Director. Some fellowships are designated as research fellowships, very few are teaching fellowships. Stipends for fellows, other student aid and educational loans for graduate students are provided by the income of special funds listed in the full catalogue.

Photo from Worcester Telegram

WORKROOM AT GEOGRAPHY FIELD CAMP

The very best of education is obtained in doing things one's self under competent direction and with good guidance.

—CHARLES W. ELIOT

CLARK UNIVERSITY BULLETIN

WORCESTER, MASSACHUSETTS

Summer Term 1949

For students already in college who wish to proceed with utmost speed toward completion of their course.

For teachers or other adults who desire further undergraduate or graduate training.

SUMMER TERM CALENDAR

First Session

June 6—Registration, 9 AM to 12:00 Noon
June 7—Classwork begins, 7:50 AM
July 4—Independence Day holiday
July 14 and 15—Examinations

Second Session

July 18—Registration
Aug. 25 and 26—Examinations
Aug. 26—Commencement, 5 PM

SUMMER TERM FACULTY

All but one from the Staff of Clark University

Howard B. Jefferson, Ph.D. President of the University and Professor of Philosophy.

Homer P. Little, Ph.D. Dean of the College and Professor of Geology.

Karl O. E. Anderson, Ph.D. Assistant Professor of English.

Henry M. Bosshard, Ph.D. Professor of German.

Charles T. Bumer, Ph.D. Professor of Mathematics.

Guy H. Burnham, M.A. Instructor in Geography.

Robert F. Campbell, Ph.D. Assistant Professor of American History.

Thomas Q. Gilson, M.A. Assistant Professor of Psychology.

Rocheleau Z. Granger, M.A. Director of Recreational Activities.

George E. Hargest, M.Ed., M.B.A. Associate Professor of Economics and Business Administration.

Sherman S. Hayden, Ph.D. Assistant Professor of International Relations.

M. Hazel Hughes, B.Ed. Director of Student Activities of the Women's College.

Robert S. Illingworth, M.A., B.D. Professor of Dramatic Art.

Victor B. Johnson, M.A. Associate Dean for Men and Assistant Professor of Psychology and Education.

Vernon Jones, Ph.D. Professor of Educational Psychology.

H. Donaldson Jordan, Ph.D. Professor of English History.

Frederick W. Killian, B.A. LL.B. Associate Professor of Economics and Sociology.

J. Fannin King, M.A. Assistant Professor of Romance Languages.

Dwight E. Lee, Ph.D. Professor of Modern European History.

Richard J. Lougee, Ph.D. Associate Professor of Physiography.

Arthur F. Lucas, Ph.D. Professor of Economics and Director of the Business Administration Program.

Donald E. MacQueen, M.A. Instructor in Romance Languages.

Arthur E. Martell, Ph.D. Associate Professor of Chemistry.

Richard B. Martin, M.A. Instructor in Chemistry.

Howard K. Moore, M.A. Instructor in English.

Theodore Nicol, Ph.D. Associate Professor of Romance Languages.

Rudolph F. Nunnemacher, Ph.D. Associate Professor of Biology.

Ralph E. Olson, Ph.D. Visiting Professor of Geography.

David Potter, Ph.D. Professor of Biology.

J. Richard Reid, Ph.D. Associate Professor of Romance Languages.

Samuel Van Valkenburg, Ph.D. Professor of Geography and Director of the Graduate School of Geography.

Milton G. Weiner, M.A. Instructor in Psychology.

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Milton G. Weiner, M.A. Instructor in Psychology.

CREDITS, COSTS, AND LIVING ACCOMMODATIONS

Each subject carried for six weeks yields credit of one-half course (three semester hours). Two subjects for twelve weeks constitute a normal program and yield credit of two courses (twelve semester hours).

The tuition for the normal program for the entire summer term of twelve weeks is $152.00; for less than a full program the charge is $38.00 per subject per six-week session. A student carrying a full program may audit a third course without additional cost; otherwise the cost of an audited course is the same as for one carried for credit. In addition to tuition there is a matriculation fee of $5.00 for students entering for the first time to be paid at the time of registration. A laboratory fee of $5.00 per session is charged for each laboratory course. Students enrolled in laboratory courses in chemistry also make a special deposit for breakage. Tuition and laboratory fees are due at the Bursar's office not later than Saturday noon of the first week of each session.

Dormitory facilities, especially for women, are somewhat limited. Reservations should be made promptly. A deposit of $10.00 is required to reserve a room. This deposit, less a charge of $1.00 per session for light, is returnable if the room is left in good order. Rooms for women range in price from $3.50 to $5.00 per week, depending upon the location of the room; rooms for men cost $5.00 per week. Room rent is payable in advance at the opening of each session.

RECREATION

Mr. Granger, Acting Director of Athletics during the college year, will be in residence during the entire term as Recreational Director. The Saturday field trips, offered during the second session in connection with *Geography of New England*, will be open to all and furnish opportunity to become acquainted with many phases of the historical and geographical features of Massachusetts.

COURSES

If a course number is followed by *a*, it is offered in the first session only; if by *b*, in the second session only; absence of a letter indicates a course extending through both sessions. Credit is not granted for a course designated as indivisible unless it is carried through both sessions. Courses whose numbers begin with *2* are open only to juniors, seniors, and graduate students; courses whose numbers begin with *3* are normally for graduate students only.

GRADUATE COURSES

Graduate students formally registered in the summer term may, with the approval of their major department, enroll in thesis courses under the direction of regular members of the staff other than those listed in the present bulletin.

Courses beginning with *2* or *3* are acceptable for credit toward a graduate degree when approved in advance by the student's major department.

Undergraduate and Graduate Courses

BIOLOGY

S.T. 11. General Biology. An introduction to the fundamental principles and problems of biology. The first six weeks will deal with zoological aspects, while the second six weeks will treat the botanical field (with Mr. Potter). Divisible with the approval of the instructor.
Daily, except Saturday, at 7:50; lab. M.Th. at 2:00.
Mr. Nunnemacher and Mr. Potter

S.T. 221a. Embryology. A comprehensive course dealing with vertebrate development.
Daily, except Saturday, at 9:00; lab. T.Th.F. at 2:00.
Mr. Nunnemacher

S.T. 18b. Genetics. An introduction to the principles of genetics.
Daily, except Saturday, at 9:00. Mr. Potter

BUSINESS ADMINISTRATION

S.T. 17a. Public Speaking. The principles of public speaking in the more practical and familiar types of address that prevail today. In addition, the course will include Parliamentary procedure, discussion groups, problems in human relations, and vocabulary drill.

Daily, except Saturday, at 10:10. Mr. Illingworth

S.T. 18. Business Organization and Finance. A unified year course in the financial structure of modern industry. Emphasis is placed on the nature of the business corporation, its financial practices, and the problems of internal financial control. Indivisible.
Daily, except Saturday, at 9:00. Mr. Hargest

S.T. 181b. Industrial Management. A study of the techniques of executive control and the measures of managerial efficiency pertaining particularly to production control, standardization of operations, purchasing, inventories, selling, and budgeting.
Daily, except Saturday, at 10:10. Mr. Gilson

S.T. 182a. Office Management. A survey of the principles of office procedure and management, with special emphasis upon office organization and planning, departmental organization, standardization of equipment and methods, employee selection and training, office forms, office costs and budgets, and correspondence.
Daily, except Saturday, at 7:50. Mr. Hargest

S.T. 183. Industrial Relations. Two session course primarily for upperclass students in Business Administration. Content: techniques of negotiation and grievance procedure; the role of the foreman, shop steward, management and governmental agencies; contract provisions and the tools of conflict and peace. Courses in Labor Problems or Personnel Administration desirable as background.
Daily, except Saturday, at 11:20. Mr. Gilson

S.T. 227b. Auditing. A course dealing with the fundamental aspects of auditing with emphasis upon professional ethics, audit programs, internal control, balance sheet accounts, profit and loss accounts, and the preparation of certificates and reports.
Daily, except Saturday, at 7:50. Mr. Hargest

CHEMISTRY

S.T. 11. General Chemistry. Chiefly inorganic. Systematic study of the elements and their principal compounds, and the fundamental laws and theories of chemistry.
Daily, except Saturday, at 9:00; lab. T.W.F. at 2:00.
Mr. Martell

S.T. 12a. Qualitative Analysis. Chiefly laboratory work, fifteen hours per week. Occasional lectures and recitations. Prerequisite, General Chemistry (Chemistry 11).
Daily, except Saturday, at 2:00. Mr. Martin

S.T. 14b. Quantitative Analysis. Chiefly laboratory work, with occasional lectures, recitations, and problems. Twelve hours of laboratory work, and one lecture per week. Prerequisite, course 12a.
Daily, except Saturday, at 2:00. Mr. Martin

S.T. 15. Elementary Organic Chemistry. Lectures and laboratory on the fundamental principles of organic chemistry. Prerequisite, a grade of C— or better in Chemistry 11 or its equivalent. Indivisible.
Daily, except Saturday, at 10:10; lab. M.Th. at 2:00.
Mr. Martell

ECONOMICS

S.T. 11. Principles of Economics. An introduction to the fundamental economic principles, together with a study of the practical application of these principles to the problems of American life. Indivisible.
Daily, except Saturday, at 10:10. Mr. Lucas

S.T. 26. Government and Industry. An analysis of the proper function of government in controlling economic activity, including theories of control, historical development of control, and such special problems as the regulation of trusts, public utilities, and railroads. Indivisible.
Daily, except Saturday, at 9:00. Mr. Lucas

EDUCATION

S.T. 202b. A History of Education in the United States. A survey of educational theory and practice in this country. Particular emphasis is given to the relationship between society and its educational agencies.
Daily, except Saturday, at 9:00. Mr. Johnson

S.T. 206b. The Teaching of Social Studies in Secondary Schools. A study of techniques of instructional planning and methods in high school courses in history and government.
Daily, except Saturday, at 7:50. Mr. Johnson

S.T. 215b. Workshop in Character and Citizenship Development in Schools. An intensive study of the main problems and principles basic to education in character and citizenship in secondary schools. Special attention will be given to experimental studies and recent developments in practice.

This workshop is being given with the aid of the Palmer Foundation with the view to organizing practical plans and procedures which teachers of various school subjects may use to make contributions to the everyday citizenship of their students. Teachers selecting the workshop will be encouraged to work on plans which they can use in their own schools. (Double course.)
Daily, except Saturday, beginning at 9:00.
Mr. Jones and Special
Lecturers and Consultants

ENGLISH

S.T. 12a. Public Speaking. A course in the composition and delivery of the most commonly used types of speeches, parliamentary procedure, discussion groups, and vocabulary drill. This course is for those not majoring in Business administration. Indivisible except that admissions for the second session (only) will be considered.
Daily, except Saturday, at 9:00. Mr. Illingworth

S.T. 15. A Survey of English Literature. A course in English literature from its beginning to the Victorian era.
Daily, except Saturday, at 10:10. Mr. Anderson and Mr. Moore

S.T. 16b. Advanced Composition. A critical study of the literary techniques of narration, description, argumentation, and exposition. Free writing under direction. May be taken only with the consent of the instructor.
Daily, except Saturday, at 11:20. Mr. Moore

S.T. 111a. A Survey of American Literature. American literature from Puritan times to 1890, with the main emphasis on the nineteenth century.
Daily, except Saturday, at 11:20. Mr. Anderson

FRENCH

S.T. 12. Intermediate. A review of grammar, exercises in composition and pronunciation, and extensive reading in a variety of modern texts. Prerequisite: One year in college French or the equivalent in high school French, to be determined by a placement test. Indivisible.
Daily, except Saturday, at 7:50. Mr. Nicol and Mr. MacQueen

S.T. 14. Readings in French Literature. The aim of French 14 is two-fold: the attainment of facile reading ability and the appreciation of at least ten works selected from various periods and chosen for their literary excellence and universal appeal. Prerequisite: French 12 or the equivalent, to be determined by a placement test.
Daily, except Saturday, at 9:00. Mr. Nicol and Mr. MacQueen

GEOGRAPHY

S.T. 10. Principles of Geography. An introductory course dealing primarily with the physical phases of geography and the application of the principles of geography to the study of selected regions throughout the world.
Daily, except Saturday, at 9:00. Mr. Olson

S.T. 191. Cartography. A discussion of various graphic methods and their application to geographic data. Since emphasis will be placed upon the mastery of cartographic tools and instruments, this course should prove particularly helpful to those planning to enter government service or to do illustrative work. Divisible.
Daily, except Saturday, at 1:30. Mr. Burnham

S.T. 21b. Principles of Physiography. Study of the processes that have produced the land forms of humid and dry regions, of glaciated areas, sea coasts, etc. The interpretation of land forms from topographic maps and aerial photographs. Prerequisite: elementary geography.
Daily, except Saturday, at 9:00. Mr. Lougee

S.T. 28b. Geography of New England. Sophomores who meet the prerequisites will be admitted by special consent of the instructor. The Saturday field trips, so successful in prewar days, will be continued in association with this course. Prerequisites: Elements of Geography and Elementary Geology, or equivalent.
Daily, except Saturday, at 10:10. Mr. Lougee

S.T. 201. Political Geography. Study of major political problems of the world as related to geographic factors. Application of principles to international relations of selected regions.
Daily, except Saturday, at 11:20. Mr. Olson

S.T. 285b. Present European Problems. A discourse on the present trends in Europe's economic development, changes from the pre-war period and the geographic aspects of the many political problems still waiting for a solution. The lectures will be based on the instructor's impressions gained during recent field work in Europe.
Daily, except Saturday, at 1:30. Mr. Van Valkenburg

S.T. 32b. Climatology. A study of the climates of the world by major regional examples.
Daily, except Saturday, at 7:50. Mr. Van Valkenburg

GERMAN

S.T. 12. Intermediate German (Second Year). Reading, translation, review of grammar essentials, exercises in composition and pronunciation. Prerequisite: One year course in college German or two years of high school German.
Daily, except Saturday, at 9:00. Mr. Bosshard

S.T. 13. Readings in German Literature (Third Year). Introduction of the student to a few of the outstanding works of German literature. Additional readings in the social sciences. Exercises in composition. Prerequisite: German 12, or 123 or the equivalent.
Daily, except Saturday, at 11:20. Mr. Bosshard

HISTORY

S.T. 11a. Medieval Europe. A survey of European civilization from the Roman Empire to the Renaissance.

A special fee of $.50 is charged for supplies and duplicate library copies of books.
Daily, except Saturday, at 10:10. Mr. Lee

S.T. 131b. The United States in the 19th Century. A survey which devotes special attention to such factors as nationalism, democracy, and industrialism in the creation of modern America.
Daily, except Saturday, at 10:10. Mr. Campbell

S.T. 22a. Tudor and Stuart England. A survey of the period from 1485 to 1688 with particular attention to the social backgrounds of English literature and to the conditions leading to colonization of America.
Daily, except Saturday, at 10:10. Mr. Jordan

S.T. 212a. Europe Since 1914. The history of the major European nations with emphasis on international relationships. Prerequisite: History 10 or its equivalent.
Daily, except Saturday, at 9:00. Mr. Lee

S.T. 221a. England Since 1760. A general course stressing the political, economic and social development of the modern commonwealth.
Daily, except Saturday, at 11:20. Mr. Jordan

S.T. 234b. American Diplomatic History. The history of the foreign relations of the United States from 1783 to the present.
Daily, except Saturday, at 9:00. Mr. Hayden

S.T. 235b. The United States in the 20th Century. A study of the chief influences in American civilization since 1900, with special attention to the emergence of current social and economic problems.
Daily, exept Saturday, at 11:20. Mr. Campbell

S.T. 274b. The Modern Far East. The course deals primarily with international relations in the region since 1895.
Daily, except Saturday, at 10:10. Mr. Hayden

MATHEMATICS

S.T. 12. Analytic Geometry and Calculus. Course 12 introduces both the differential and the integral calculus and is essential to further work in mathematics as well as to an understanding of many reports in the sciences. Topics from analytic geometry are studied as the need for them arises in the development of the calculus. Prerequisite: Mathematics 11 or its equivalent.
Daily, except Saturday, at 10:10. Mr. Bumer

S.T. 14. Advanced Calculus. In the course in advanced calculus the following topics are among those studied: complex numbers, partial differentiation, infinite series, vector analysis, multiple and line integrals. Emphasis is placed on applications to the physical sciences and engineering. Prerequisite: Mathematics 12.
Daily, except Saturday, at 7:50. Mr. Bumer

PSYCHOLOGY

S.T. 11. General Psychology. An introduction to the principles of human behavior. Lectures and class discussion.
Daily, except Saturday, at 10:10. Mr. Weiner

SOCIOLOGY

S.T. 11. Principles of Sociology. *First Session—Social Organization.* The study of social structure and of social interaction. Biological, Geographical, and cultural basis of man and his social life. Tribe, clan, community, society, folkways, mores, class, caste, and race. *Second Session—Social Disorganization.* A study of the effects of social and cultural change from primary to secondary group life. The effects of mobility, urbanization, and secularization. Problems of the person in society; dependency, sickness, population, divorce, politics, religion, minority groups. Divisible.
Daily, except Saturday, at 10:10. Mr. Killian

S.T. 12a. Introduction to Cultural Anthropology. The evolution and development of man and his culture: Basic concepts; the races of man and their distribution; process of adaptation and adjustment through culture; primitive, historic and modern culture complexes compared; divergence, transmission, and function of culture; origin and growth of civilizations; contemporary pre-literate peoples; relationship of anthropology to the other social sciences. Prerequisite: Sociology 11 or approval of instructor.
Daily, except Saturday, at 11:20. Mr. Killian

S.T. 21b. The Family and Society. A study of the form and function of the family at different culture levels; the influence of geographic, biological, demographic, and cultural forces; secondary groups and the family; rural and urban family. Prerequisite: Sociology 11 or approval of the instructor.
Daily, except Saturday, at 11:20. Mr. Killian

SPANISH

S.T. 12. Intermediate. Review of grammar, exercises in composition and pronunciation, intensive and extensive reading of texts dealing with Spain and Spanish America. Prerequisite: Spanish 11 or the equivalent in high school Spanish, depending on the result of a placement test. Indivisible.
Daily, except Saturday, at 9:00. Mr. King and Mr. Reid

S.T. 14. Reading in Spanish and Spanish-American Literature. The aim of Spanish 14 is two-fold; the attainment of facile reading ability and an appreciation of some outstanding examples of Spanish and Spanish-American literature. Prerequisite: Spanish 12 or the equivalent, to be determined by a placement test.
Daily, except Saturday, at 11:20. Mr. King and Mr. Reid

Please take special note of the
workshop in education under the
auspices of the Palmer Foundation.

For further information address

The Dean of the College

CLARK UNIVERSITY BULLETIN

Number 189 January 1949

This Bulletin is published in January, March, October, November, and December.

Entered as second-class matter December 29, 1920, at the Post Office at Worcester, Mass., under the Act of August 24, 1912. Acceptance for mailing at special rate of postage provided for in section 1103, Act of October 3, 1917, authorized January 24, 1921.

Clark University Bulletin

NUMBER 190 MARCH, 1949

CATALOGUE NUMBER

WORCESTER, MASSACHUSETTS

Received from Heffernan
Press, 3-23-49

Clark University Bulletin

CATALOGUE NUMBER

The Catalogue is a record for the current academic year 1948-49. Such announcements for the year 1949-50 as can be made at the time of publication are included.

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October, November and December

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JULY

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AUGUST

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SEPTEMBER

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OCTOBER

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NOVEMBER

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DECEMBER

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1950

JANUARY

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MAY

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JUNE

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AUGUST

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SEPTEMBER

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OCTOBER

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NOVEMBER

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DECEMBER

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Calendar

The academic year begins on the Monday before the fourth Thursday in September and ends in 1948-49 thirty-six weeks later, near the end of May. It includes two approximately equal semesters and two vacation periods;—two weeks including Christmas Day and New Year's, and a week near the first of April.

The first semester ends on the Saturday before the twentieth Monday and the second semester begins on the twentieth Monday of the academic year.

The Summer term for 1949 begins about one week after the end of the regular academic year and continues for twelve weeks. The summer term is divided into two sessions of six weeks each.

1948-1949

1948

Sept. 20	Monday	Beginning of academic year.
Oct. 12	Tuesday	Columbus Day. A holiday.
Nov. 1	Monday	Last day for receiving applications for admission to candidacy for the Degree of Doctor Philosophy in May 1949.
Nov. 11	Thursday	Armistice Day. Not a holiday.
Nov. 13	Saturday	Mid-semester reports.
Nov. 24	Wednesday	Beginning of Thanksgiving recess at 5 P.M.
Nov. 29	Monday	End of Thanksgiving recess at 8 A.M.
Dec. 18	Saturday	Beginning of Christmas recess at 1 P.M.

1949

Jan. 3	Monday	End of Christmas recess at 8 A.M.
Jan. 10	Monday	Registration for second semester. Classes omitted.
Jan. 17	Monday	Beginning of semester examination period.
Jan. 29	Saturday	End of first semester.
Jan. 31	Monday	Beginning of second semester.
Feb. 5	Saturday	Last day for receiving applications for admission to candidacy for the Degree of Master of Arts in May 1949.
Feb. 22	Tuesday	Washington's Birthday. A holiday.
Mar. 19	Saturday	Mid-semester reports.
Apr. 2	Saturday	Beginning of spring recess at 1 P.M.
Apr. 11	Monday	End of spring recess at 8 A.M.
Apr. 19	Tuesday	Patriot's Day. Not a holiday.
May 2	Monday	Ph.D. dissertations due at Recorder's Office at 9 A.M.
May 9	Monday	M.A. theses due at Recorder's Office at 9 A.M.
May 16	Monday	Beginning of semester examination period.
May 28	Saturday	End of academic year.
May 29	Sunday	Commencement Day.

1949 Summer Session

June 6	Monday	Beginning of first session of summer term. Registration day.
July 4	Monday	Fourth of July. A holiday.
July 15	Friday	End of first session of summer term.
July 18	Monday	Beginning of second session of summer term. Registration day.
Aug. 26	Friday	End of summer term. Conferring of degrees.

1949-1950

Sept. 19	Monday	Beginning of academic year 1949-50.
Sept. 29	Thursday	Last day for payment of term bills.
Oct. 12	Wednesday	Columbus Day. A holiday.
Nov. 1	Tuesday	Last day for receiving applications for admission to candidacy for the Degree of Doctor of Philosophy in June 1950.
Nov. 11	Friday	Armistice Day. Not a holiday.
Nov. 12	Saturday	Mid-semester reports.
Nov. 23	Wednesday	Beginning of Thanksgiving recess at 5 P.M.
Nov. 28	Monday	End of Thanksgiving recess at 8 AM.
Dec. 17	Saturday	Beginning of Christmas recess at 1 P.M.
1950		
Jan. 3	Tuesday	End of Christmas recess at 8 A.M.
Jan. 10	Tuesday	Registration for second semester. Classes omitted.
Jan. 16	Monday	Beginning of semester examination period.
Jan. 28	Saturday	End of first semester.
Jan. 30	Monday	Beginning of second semester.
Feb. 4	Saturday	Last day for receiving applications for admission to candidacy for the Degree of Master of Arts in June 1950.
Feb. 9	Thursday	Last day for payment of term bills.
Feb. 22	Wednesday	Washington's Birthday. A holiday.
Mar. 18	Saturday	Mid-semester reports.
Apr. 1	Saturday	Beginning of spring recess at 1 P.M.
Apr. 10	Monday	End of spring recess at 8 A.M.
Apr. 19	Wednesday	Patriot's Day. Not a holiday.
May 8	Monday	Ph.D. dissertations due at Recorder's Office at 9 A.M.
May 15	Monday	M.A. theses due at Recorder's Office at 9 A.M.
May 18	Thursday	Beginning of semester examination period.
June 3	Saturday	End of academic year.
June 4	Sunday	Commencement Day.
Sept. 25	Monday	Beginning of academic year 1950-51.

BOARD OF TRUSTEES

Final authority in all matters pertaining to the University is lodged in the Board of Trustees by charter granted by the General Court of the Commonwealth of Massachusetts.

George H. Mirick (1920), President	Worcester, Mass.
Francis H. Dewey, Jr. (1934)	Worcester, Mass.
Robert H. Loomis (1936)	Boston, Mass.
Frank L. Adams (1938)	Worcester, Mass.
Howard M. Booth (1939)	Worcester, Mass.
Samuel H. Dolbear (1940)	New York, N. Y.
Carl E. Wahlstrom (1942), Vice-President	Worcester, Mass.
Raymond T. Gifford (1947), Treasurer	Worcester, Mass.
John Jeppson (1948)	Worcester, Mass.
Harry C. Coley (1948)	Worcester, Mass.

ELECTED TO REPRESENT THE ALUMNI

Clarence P. Shedd (1945) for four years
Archibald M. Hillman (1946) for four years
Roland A. Erickson (1947) for four years
Hiram N. Rasely (1948) for four years

ADMINISTRATION

President of the University	Howard B. Jefferson
Dean of the College	Homer P. Little
Treasurer	Raymond T. Gifford 18 Chestnut St., Worcester, Mass.
Librarian	Albert C. Gerould
Associate Dean for Men	Victor B. Johnson
Director of Student Activities in the Women's College	M. Hazel Hughes
Recorder	Lydia P. Colby
Assistant Treasurer	Allan B. Miller
Bursar	Mary A. Hubbard
Director of Public Relations	Donald P. Cole
Medical Director for Men	Michael B. Fox, M.D.
Medical Director for Women	Constance Kaliris, M.D.

Faculty

(Listed in order of academic seniority within each rank)

HOWARD BONAR JEFFERSON, PH.D., LL.D. — 160 Woodland St.
President and Professor of Philosophy since 1946.
A.B., Denison University, 1923; Ph.D., Yale University, 1929; LL.D., Denison University, 1948.

HOMER PAYSON LITTLE, PH.D. — 156 Woodland St.
Dean of the College and Professor of Geology since 1922.
A.B., Williams College, 1906; Ph.D., Johns Hopkins University, 1910.

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* WALLACE WALTER ATWOOD, PH.D., SC.D. — 21 Otsego Rd.
President, Professor of Physical and Regional Geography, and Director of the Graduate School of Geography, 1920-1946. President Emeritus.

BENJAMIN SHORES MERIGOLD, PH.D., SC.D. — 17 Charlotte St.
Professor of Chemistry, Emeritus.

GEORGE HUBBARD BLAKESLEE, PH.D., L.H.D.
Professor of History and International Relations, Emeritus.

PHILIP HUDSON CHURCHMAN, PH.D. — 20 Institute Rd.
Professor of Romance Languages, Emeritus.

HAVEN DARLING BRACKETT, PH.D. — 114 Woodland St.
Professor of Greek and Latin, Emeritus.

LEROY ALLSTON AMES, A.M.
Professor of English Literature, Emeritus.

WILLIAM HOMER WARREN, PH.D.
Professor of Organic Chemistry, Emeritus.

DOUGLAS CLAY RIDGLEY, PH.D.
Professor of Geography in Education, Emeritus.

CAREY EYSTER MELVILLE — 16 Isabella St.
Professor of Mathematics, Emeritus.

LORING HOLMES DODD, PH.D. — 88 Sagamore Rd.
Professor of Rhetoric. Curator of Art.
A.B., Dartmouth College, 1900; A.M., Columbia University, 1901; Ph.D., Yale University, 1907. Instructor, 1910-13; Assistant Professor, 1913-16; Associate Professor, 1916-20; Professor since 1920.

* Deceased, July 24, 1949

SAMUEL J. BRANDENBURG, PH.D. 173 Woodland St.
Professor of Economics and Sociology since 1923.
A.B., Miami University, 1904; Ph.M., University of Chicago, 1909; Ph.D., University of Wisconsin, 1922.

* WALTER ELMER EKBLAW, PH.D. 11 Wheeler Rd., N. Grafton, Mass.
Professor of Geography.
A.B., University of Illinois, 1910; A.M., 1912; Ph.D., Clark University, 1926. Associate Professor, 1926-28; Professor since 1928.

JESSE LUNT BULLOCK, PH.D. 35 Downing St.
Professor of Chemistry and Director of the Chemical Laboratories.
A.B., Harvard University, 1914; A.M., 1928; Ph.D., 1932. Assistant Professor, 1926-32; Associate Professor, 1932-37; Professor since 1937 (February).

JAMES ACKLEY MAXWELL, PH.D. 15 Sunnyhill Dr.
Professor of Economics.
A.B., Dalhousie University, 1921; A.M., Harvard University, 1923; Ph.D., 1927. Instructor, 1924-26; Assistant Professor, 1926-28; Associate Professor, 1928-37; Professor since 1937 (February).

SAMUEL VAN VALKENBURG, PH.D. 11 South Flagg St.
Professor of Geography. Director of the Graduate School of Geography.
Ph.D., University of Zürich, 1918. Special Lecturer in Geography, second semester, 1926-27; Assistant Professor, 1927-29; Associate Professor, 1932-37; Professor since 1937 (February).

ROBERT STANLEY ILLINGWORTH, A.M., ED.M. 209 Lovell St.
Professor of Dramatic Art, Alumni Secretary.
A.B., Clark University, 1917; A.M., Lafayette College, 1926; Ed.M., Harvard University, 1933; B.D., Andover Theological School, 1945. Associate Professor of English, 1931-38; Professor since 1938 (February). Director of the Summer School, 1935-41.

VERNON JONES, PH.D. 267 Salisbury St.
Professor of Educational Psychology.
A.B., and A.M., University of Virginia, 1920; A.M., Columbia University, 1924; Ph.D., 1926. Associate Professor, 1926-38; Professor since 1938 (February).

HENRY DONALDSON JORDAN, PH.D. 171 Woodland St.
Professor of English History.
A.B., Harvard University, 1918; A.M., 1922; Ph.D., 1925. Associate Professor, 1931-38; Professor since 1938 (February).

* Deceased June 5, 1949

Dwight Erwin Lee, Ph.D. 3 Woodman Rd.

Professor of Modern European History.

A.B., University of Rochester, 1921; A.M., 1922; Ph.D., Harvard University, 1928 (February). Assistant Professor, 1927-30; Associate Professor, 1930-38; Professor since 1938 (February).

Arthur Fletcher Lucas, Ph.D. 54 Morningside Rd.

Professor of Economics. Director of the Division of Business Administration.

A.B., Bates College, 1920; A.M., Princeton University, 1923; Ph.D., 1925. Assistant Professor, 1926-29; Associate Professor, 1929-38; Professor since 1938 (February).

David Potter, Ph.D. 113 South St., Auburn, Mass.

Professor of Biology.

B.Sc., Massachusetts Agricultural College, 1916; M.Sc., 1923; Ph.D., Harvard University, 1932. Instructor, 1924-27; Assistant Professor, 1927-33; Associate Professor, 1933-38; Professor since 1938 (February).

Percy Martin Roope, Ph.D. 2 Lovell Drive

Professor of Physics.

A.B., Clark University, 1920; A.M., 1924; Ph.D., 1927. Instructor, 1921-27; Assistant Professor, 1927-31; Associate Professor, 1931-43; Professor since 1943.

****Henry Morant Bosshard, Ph.D.** 10 Shaffner St.

Professor of German.

Ph.D., University of Zürich, 1919; M.Ed., Harvard University, 1921. Assistant Professor, 1927-32; Associate Professor, 1932-43; Professor since 1943.

Raymond Edward Murphy, Ph.D.
153 Boylston St., Shrewsbury, Mass.

Professor of Economic Geography since 1946.

B.S., Missouri School of Mines and Metallurgy, 1923; M.S., University of Wisconsin, 1926; Ph.D., 1930.

Heinz Werner, Ph.D. 10 Atwater St.

Professor of Psychology since 1947.

Ph.D., University of Vienna, 1915.

Joseph Weinreb, M.D. 21 Catherine St.

Professor (Affiliate) of Psychology since 1947.

B.A., Vanderbilt University, 1931; M.D., 1935.

*Died Nov. 23, 1949

CHARLES THEODORE BUMER, PH.D. 121 Richmond Ave.
Professor of Mathematics since 1948.
B.Sc., Denison University, 1919; M.A., Harvard University, 1922; Ph.D., Ohio State University, 1931.

GEORGE LESLIE STOUT, M.A. 3 Tuckerman St.
Professor (Affiliate) of Fine Arts since 1948
A.B., University of Iowa, 1921; M.A., Harvard University, 1929.

RUDOLF FINK NUNNEMACHER, PH.D. 1 Manchaug Rd., Sutton, Mass.
Associate Professor of Biology.
B.S., Kenyon College, 1934; M.A., Harvard University, 1935; Ph.D., 1938. Assistant Professor, 1939-44; Associate Professor since 1944.

JOHN ELDERKIN BELL, ED.D. 117 Forest St.
Associate Professor of Psychology since 1944.
B.A., University of British Columbia, 1933; M.A., Columbia University, 1941; Ed.D., 1942.

PAUL FRANCIS MARBLE, A.M. Worcester Rd., Princeton, Mass.
Associate Professor of English.
Ph.B., Brown University, 1930; A.M., 1933. Instructor in English 1939-44; Assistant Professor 1944-46; Associate Professor since 1946 (January).

ARTHUR EARL MARTELL, PH.D. 17 Hapgood Way, Shrewsbury
Associate Professor of Chemistry.
B.S., Worcester Polytechnic Institute, 1938; Ph.D., New York University, 1941. Assistant Professor, 1942-46; Associate Professor since 1946 (January).

DONALD MACGILLAVRY, JR., PH.D. 1133 Pleasant St.
Associate Professor of Chemistry since 1946.
Cand., University of Amsterdam, 1923; Docts., University of Amsterdam, 1928; Ph.D., Columbia University, 1933.

*PHILIP MOTLEY PALMER, PH.D. 46 Tory Fort Lane
Associate Professor of German since 1946.
A.B., Bowdoin College, 1926; A.M., Harvard University, 1927; Ph.D., 1930.

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*Absent on leave, 1948-49.

Eliot Herman Rodnick, Ph.D. Worcester State Hospital
Associate Professor (Affiliate) of Abnormal Psychology.
B.A., Yale University, 1933; Ph.D., 1936. Visiting Lecturer, 1942-43; Assistant Professor (Affiliate) 1943-46; Associate Professor (Affiliate) since 1946.

Herbert P. Barnett 19B Elm St.
Associate Professor (Affiliate) of Fine Arts since 1946.
Head of Department of Drawing, Painting and Sculpture, School of the Worcester Art Museum.

Richard Jewett Lougee, Ph.D.
Brigham Hill Rd., N. Grafton, Mass.
Associate Professor of Physiography since 1947 (January).
B.S., Dartmouth College, 1927; A.M., University of Michigan, 1929; Ph.D., Columbia University, 1938.

Frederick W. Killian, A.B. 15 Worcester Ave., Grafton, Mass.
Associate Professor of Sociology since 1947.
A.B., New York University, 1934; LL.B., 1925.

Alson C. Patton, Jr., M.A. 89 Coolidge Rd.
Associate Professor of Mathematics since 1947.
B.A., University of Tennessee, 1920; M.A., Yale University, 1922.

George Edward Hargest, M.B.A. 150 Woodland St.
Associate Professor of Economics and Business Administration.
B.S., Temple University, 1933; M.Ed., 1937; M.B.A., Boston University, 1947. Assistant Professor, 1942-48; Associate Professor since 1948.

Theodore Nicol, Ph.D. 10 Circuit Ave.
Associate Professor of Romance Languages.
A.B., Clark University, 1926; A.M. Harvard University, 1928; Ph.D., 1933. Visiting Professor, 1946-48; Associate Professor since 1948.

J. Richard Reid, Ph.D. Stafford St., Rochdale, Mass.
Associate Professor of Romance Languages.
A.B., Swarthmore College, 1935; A.M., Harvard University, 1936; Ph.D., 1943. Assistant Professor, 1944-48; Associate Professor since 1948.

Seymour Wapner, Ph.D. 20 Prouty Lane
Associate Professor of Psychology since 1948.
A.B., New York University, 1939; A.M., University of Michigan, 1940; Ph.D., 1943.

HENRY JOHN WARMAN, PH.D. 193 Lovell St.
Associate Professor of Geography.
B.S. in Ed., Bloomsburg, Pa., State Teachers' College, 1932; Ed.M., Temple University, 1938; Ph.D., Clark University, 1945. Assistant Professor, 1943-44, 1945-48; Associate Professor since 1948.

THELMA G. ALPER, PH.D. Wellesley, Mass.
Associate Professor of Psychology since 1948.
A.B., Wellesley College, 1929; M.A., 1933; Ph.D., Harvard University, 1943.

EDITH MEYER, PH.D. Jamaica Plain, Mass.
Associate Professor (Affiliate) in Psychology, 1947-48.
Ph.D., University of Leipzig, 1933; Diplômes des Etudes Pédagogiques, University of Geneva, 1935.

FREDERICK WYATT, PH.D. Cambridge, Mass.
Associate Professor (Affiliate) in Psychology, 1947-48.
Ph.D., University of Vienna, 1936.

ROY CHALMERS GUNTER, PH.D. Dodge, Mass.
Assistant Professor of Physics.
B.S., Bowdoin College, 1938; A.M., Boston University, 1939; Ph.D., 1942. Instructor in Physics and Mathematics, 1941 (February)-1943; Assistant Professor of Physics since 1943.

KARL OSCAR EMANUEL ANDERSON, PH.D. 44 Richmond Ave.
Assistant Professor of English since 1945.
A.B., Harvard University, 1927; A.M., 1928; Ph.D., 1942.

BEVERLY HOSBROOK BOWMAN, M.S. 508 Grove St.
Assistant Professor of Economics and Business Administration.
B.S., Northeastern State College (Oklahoma), 1937; M.S., Oklahoma Agricultural and Mechanical College, 1939.

ROBERT FRANCIS CAMPBELL, PH.D. 130 Woodland St.
Assistant Professor of American History since 1946.
A.B., Yale University, 1939; A.M., Columbia University, 1940; Ph.D., 1947.

THOMAS QUINLEVAN GILSON, A.M.
82 Pleasant St., Leicester, Mass.
Assistant Professor of Psychology since 1946.
A.B., Princeton University, 1938; A.M., Columbia University, 1942.

Sherman Strong Hayden, Ph.D. 68 Moore Ave.
Assistant Professor of International Relations since 1946.
A.B., Harvard University, 1930; LL.B., 1933; M.A., Columbia University, 1936; Ph.D., 1942.

J. Fannin King, A.M. Estabrook Hall
Assistant Professor of Romance Languages since 1946.
A.B., Pomona College, 1936; A.M., Harvard University, 1937.

Claude W. Barlow, Ph.D. 50 Woodland St.
Assistant Professor of Classics since 1947.
A.B., Amherst College, 1928; M.A., Indiana University, 1930; Ph.D., Yale University, 1935.

Morris H. Cohen, A.B. 8 Norwood St.
Assistant Professor of Government since 1947.
A.B., University of Chicago, 1939.

James S. Edwards, A.M. 768 Main St.
Assistant Professor of German since 1947.
A.B., Brown University, 1936; A.M., 1938.

H. Earle Johnson, Mus.M. 24 William St.
Assistant Professor of Music.
Mus.B., Boston University, 1933; Mus.B., Yale University, 1934; Mus.M., 1935. Instructor, 1936-42; Assistant Professor since 1947.

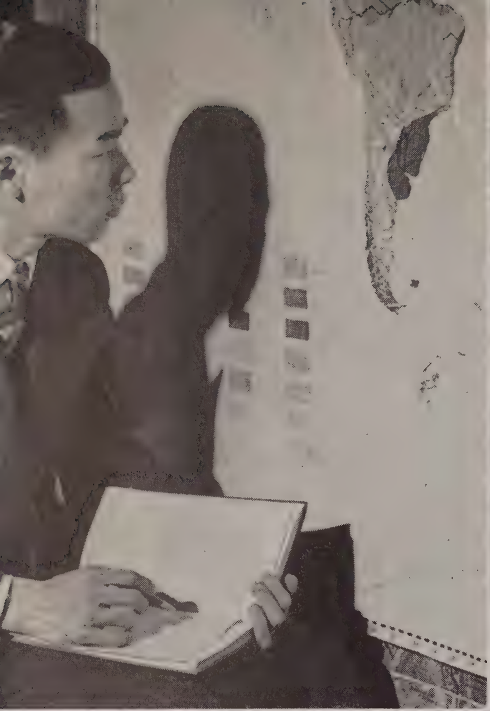
Victor B. Johnson, A.M. Dodge, Mass.
Assistant Professor of Education since 1947. Associate Dean for Men.
A.B., Upsala College, 1933; A.M., Teachers College, Columbia University, 1941.

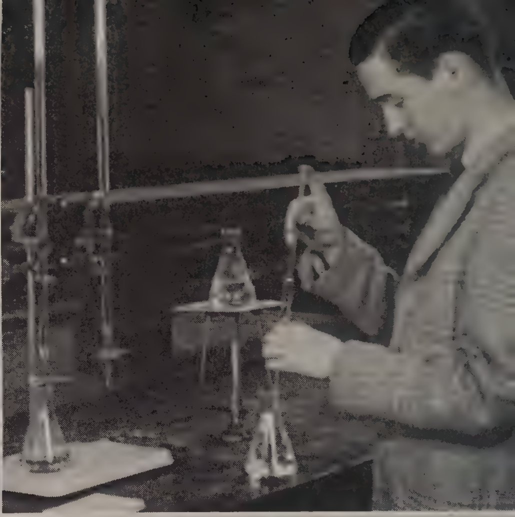
John Hiram Blair, M.A. 17 Fiske St.
Assistant Professor of Physiology since 1948.
B.A., Wesleyan University, 1937; M.A., 1939.

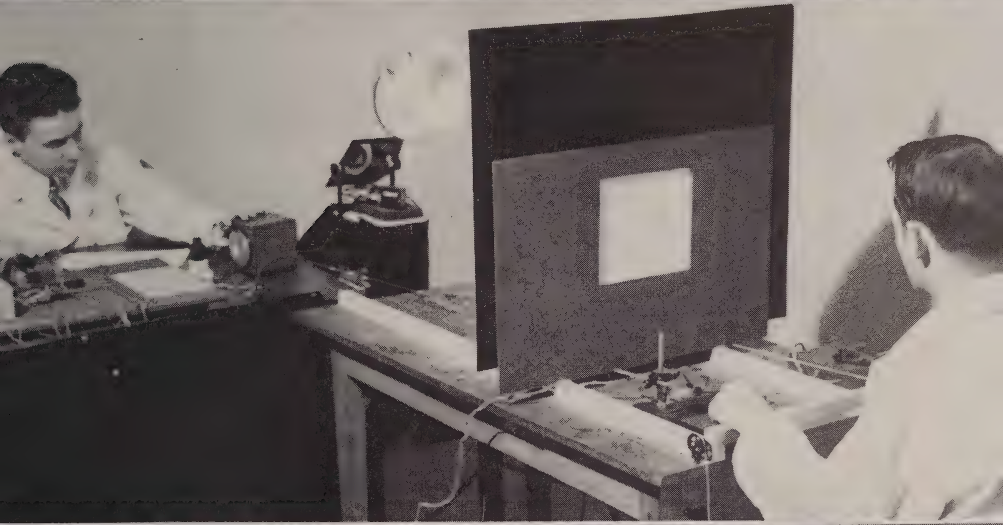
David Lane, M.A. 26 Minthorne St.
Assistant Professor of Education since 1948.
A.B., University of Maryland, 1941; M.A., Columbia University, 1947.

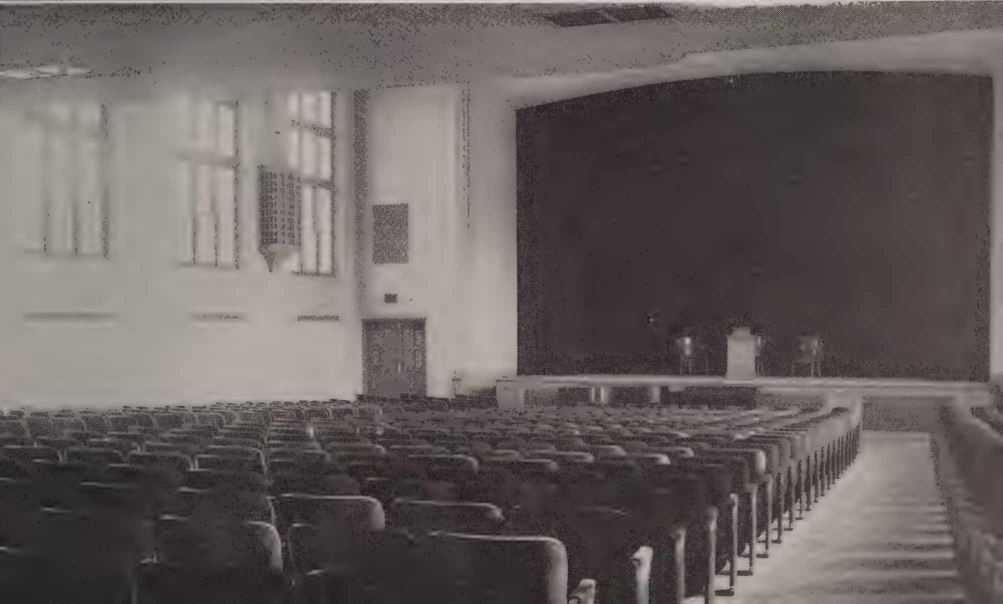
Walter Andrew Ramsey, M.A.
9 Colonial Drive, Cherry Valley, Mass.
Assistant Professor of Romance Languages since 1948.
B.A., University of Cincinnati, 1937; M.A., 1939.

Estabrook Hall









DONALD HENRY LETENDRE, A.M. IN ED.
29 Church St., Spencer, Mass.
Instructor in English since 1946 (January).
A.B., Clark University, 1938; A.M. in Ed., 1939.

GUY HARVEY BURNHAM, A.M. 19 Woodman Rd.
Instructor in Geography since 1946. Cartographer, Graduate School of Geography since 1922.
A.B., Clark University, 1916; A.M., 1922.

RICHARD BLAZO MARTIN, A.M. 7 Forestdale Rd.
Instructor in Chemistry since 1946.
A.B., Clark University, 1939; A.M., 1940.

HOWARD KIMBALL MOORE, A.M. 1A Melville St.
Instructor in English since 1946.
A.B., Boston University, 1939; A.M., 1940.

CHESTER CUSHING STONE, B.S. 18 High St., Spencer, Mass.
Instructor in Mathematics since 1946.
B.S., Massachusetts State College, 1942.

DONALD G. ABBOTT, M.A. 4 Cabot St.
Instructor in English since 1947.
B.A., Tufts College, 1946; M.A., Harvard University, 1947.

DONALD E. MACQUEEN, M.A. 22 Richards St.
Instructor in Romance Lanaguages since 1947.
B.A., Adrian College, 1937; M.A., University of Michigan, 1938.

ROBERT N. BECK, M.A. 6 Watson Ave.
Instructor in Philosophy since 1948
A.B., Clark University, 1947; M.A., Boston University, 1948.

WERNER LUDWIG LOEWY, M.A. North Oxford, Mass.
Instructor in German since 1948.
B.A., Yale University, 1942; M.A., 1943.

SHELDON SCHAFFER, M.A. 4 Prouty Lane
Instructor in Economics since 1948.
B.A., University of Iowa, 1944; M.A., Yale University, 1947.

LESLIE PHILLIPS, M.A. Worcester State Hospital
Instructor (Affiliate) in Clinical Psychology.
M.A., University of Chicago, 1944.

Philip H. Breen, LL.B. 151 Barnard Rd.
Visiting Lecturer in Business Law since 1947 (January).
A.B., The College of the Holy Cross, 1920; LL.B., Boston University, 1923.

Erwin Raisz, Ph.D.
Visiting Lecturer in Geography, 1947-48.
Diploma, Royal Polytechnicum, Budapest, 1914; M.A., 1924; Ph.D., Columbia University, 1929.

Harold Alfred John Green, B.A. 117 Forest St.
Visiting Lecturer in International Economics.
B.A., Oxford University, 1947.

George F. Mahl, M.A. New Haven, Conn.
Visiting Lecturer in Psychology.
A.B., Oberlin College, 1939; M.A., 1941; Ph.D., Yale University, 1948.

TEACHING FELLOWS

Charles N. Brickley
History and International Relations.
B.Ed., Rhode Island College of Education, 1945; A.M., Clark University, 1946.

Winnifred M. Irwin
History and International Relations.
A.B., University of British Columbia, 1945.

Milton G. Weiner
Psychology and Education.
A.B., Clark University, 1946; A.M., 1947.

Edward E. LeClair, Jr.
Economics and Sociology.
A.B., Clark University, 1948.

David E. White
Economics and Sociology.
A.B., Dartmouth College, 1943.

Walter H. Zukowski
Economics and Sociology.
B.B.A. Clark University, 1948.

PHYSICAL EDUCATION STAFF

*Ernest R. Whitman Director of Physical Education for Men.	21 Maywood St.
M. Hazel Hughes, B.Ed. Director of Physical Education for Women. B.Ed., Clark University, 1944.	638 Pleasant St.
Rocheleau Z. Granger, Jr., M.A. in Ed. Assistant Director of Physical Education for Men. B.A., Clark University, 1938; M.A. in Ed, 1939.	Brookfield, Mass.
Katharine A. Reed, B.A. Assistant Director of Physical Education for Women. B.A., Syracuse University, 1947.	Woodland House
Roland C. Lambert, B.S. Assistant Director of Physical Education for Men. B.S., Springfield College, 1937.	1285 Main St.

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*Deceased. December 15, 1948.

Administrative Boards and Committees

THE UNIVERSITY FACULTY

The Faculty consists of the President, the Librarian, and all members of the staff giving regular courses of instruction. It has immediate supervision over the general educational work of the university and is responsible for the nomination to the Board of Trustees of candidates for baccalaureate degrees and for honorary degrees.

Secretary of the Faculty, Dwight E. Lee.

THE UNIVERSITY SENATE

An advisory board appointed by the President.

Samuel J. Brandenburg
Jesse L. Bullock
Loring H. Dodd
W. Elmer Ekblaw
Robert S. Illingworth
Vernon Jones
Dwight E. Lee
Homer P. Little
Samuel Van Valkenburg

THE GRADUATE BOARD

The Graduate Board consists of the President and representatives of the departments offering advanced graduate instruction. It has general control of the work of the Graduate Division and is responsible for the nomination to the Board of Trustees of candidates for the degrees of Master of Arts and of Doctor of Philosophy.

President Howard B. Jefferson, *ex officio*

Samuel J. Brandenburg
Jesse L. Bullock
W. Elmer Ekblaw
Sherman S. Hayden
Vernon Jones
H. Donaldson Jordan
Dwight E. Lee
Arthur F. Lucas
Arthur E. Martell
David Potter
Percy M. Roope
Samuel Van Valkenburg
Heinz Werner
James A. Maxwell, *Secretary*

THE COLLEGE BOARD

The College Board consists of the President, the Dean of the college, and six members of the Faculty, appointed by the President. It has immediate supervision over the work of the Undergraduate

Division, subject to the control of the Faculty, and recommends to the Faculty candidates for the bachelor's degrees.

President Howard B. Jefferson, *ex officio*
Dean Homer P. Little, *ex officio*
Associate Dean Victor B. Johnson, *ex officio*
Henry M. Bosshard
M. Hazel Hughes
Arthur F. Lucas
Paul F. Marble
Percy M. Roope
Rudolph F. Nunnemacher, *Secretary*

THE ACADEMIC COUNCIL

The Council, established by vote of the faculty, is appointed by the President of the University subject to regulations providing for the distribution of its membership among the various divisions and departments.

Its duties are to make recommendations regarding undergraduate educational policies, to check on the program of courses offered to undergraduates and to supervise honors work, senior surveys, and comprehensive examinations.

President Howard B. Jefferson, *ex officio*
Dean Homer P. Little, *ex officio*
Arthur F. Lucas, *Chairman*
John E. Bell, *Secretary*
Karl O. E. Anderson
Henry M. Bosshard
H. Donaldson Jordan
Homer P. Little
Arthur E. Martell
Theodore Nicol
David Potter

ADMINISTRATIVE COMMITTEE FOR THE DIVISION OF BUSINESS ADMINISTRATION

President Howard B. Jefferson, *ex officio*
Arthur F. Lucas, *Chairman*
John E. Bell
Samuel J. Brandenburg
George E. Hargest
Homer P. Little
Raymond E. Murphy

THE COMMITTEE ON PERSONNEL AND ORGANIZATION

Elected to advise the President regarding the personnel and the organization of departments.

Homer P. Little, *ex-officio*
Henry M. Bosshard
H. Donaldson Jordan
Dwight E. Lee
Arthur F. Lucas
James A. Maxwell
David Potter

THE LIBRARY COMMITTEE

H. Donaldson Jordan, *Chairman*
Karl O. E. Anderson
Arthur E. Martell

STANDING COMMITTEES OF THE GRADUATE BOARD

The President of the university is, ex officio, a member of all committees of the Graduate Board.

THE COMMITTEE ON CREDENTIALS

The committee passes upon applications for admission to the graduate division and makes recommendations to the Graduate Board in respect to fellowships and scholarships and candidacy for graduate degrees.

S. Van Valkenburg, *Chairman*
Samuel J. Brandenburg
Jesse L. Bullock
Vernon Jones
Dwight E. Lee
James A. Maxwell, *Secretary*

THE COMMITTEE ON PROFICIENCY IN FOREIGN LANGUAGES

The committee examines candidates for the degree of Doctor of Philosophy for proficiency in foreign languages.

J. Richard Reid, Professor of Romance Languages
James S. Edwards, Assistant Professor of German
A representative of the students' major department

STANDING COMMITTEES OF THE COLLEGE BOARD

The President of the university and the Dean of the college are, *ex officio,* members of all committees of the College Board.

EXECUTIVE COMMITTEE

Rudolph F. Nunnemacher, *Secretary*
Paul F. Marble

THE COMMITTEE ON ADMISSIONS

Sherman S. Hayden
Robert S. Illingworth
Victor B. Johnson
David Potter

THE COMMITTEE ON ATHLETICS

David Potter, *Chairman*
James A. Maxwell
Rocheleau Z. Granger
Henry J. Warman

COMMITTEE ON STUDENT FINANCES

Guy H. Burnham, *Chairman*
George E. Hargest
Rocheleau Z. Granger

COMMITTEE ON SOCIAL AFFAIRS

Rudolph F. Nunnemacher, *Chairman*
M. Hazel Hughes
Donald H. Letendre
Victor B. Johnson

COMMITTEE ON FRATERNITIES

J. Richard Reid, *Chairman*
W. Elmer Ekblaw

COMMITTEE ON STUDENT PUBLICATIONS

Donald H. Letendre, *Chairman*
Henry M. Bosshard
Percy M. Roope

COMMITTEE ON STUDENT PERSONNEL

Henry M. Bosshard, *Chairman*
Victor B. Johnson
Paul F. Marble
M. Hazel Hughes

THE COMMITTEE ON VETERANS

David Potter, *Chairman*
John E. Bell
Percy M. Roope
Samuel Van Valkenburg

THE UNIVERSITY

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Historical Note

The charter of Clark University was granted by the General Court of Massachusetts in 1887. Within two years, in October, 1889, buildings had been constructed, a faculty assembled, and the first students enrolled.

In 1889 there existed in the United States, and especially in New England, reasonably ample provision for undergraduate liberal arts education. On the other hand, there was only one institution, Johns Hopkins University, which placed particular emphasis upon original research and the training of specialists. From 1889 to 1902, Clark University devoted its attention exclusively to graduate study and research, thus performing a unique function in higher education in America.

The long devotion to education and the generosity of Jonas Gilman Clark made possible the establishment of the University which bears his name. In this he was ably assisted by his wife, Susan W. Clark, and by prominent citizens of Worcester, where he had resided since shortly after the Civil War.

For president of the new institution, Mr. Clark and the trustees selected Granville Stanley Hall, noted psychologist of Johns Hopkins University. President Hall organized in Worcester a faculty of brilliant scholars who earned an enviable reputation for the University and decisively shaped its character. In 1900, when the Association of American Universities was founded, Clark University was one of the fourteen charter members.

As time passed, the obligations of the University were extended to include an undergraduate college. In the fall of 1902, in compliance with the will of Mr. Clark, the trustees opened Clark College to the first class of young men who sought, in three years' time, "preparation for citizenship and their work in life." The administration and the faculty of the College were distinct from those of the Graduate School.

From the beginning, Clark College departed from the prevailing type of American college of that day. Seriousness of purpose and hard work on the part of undergraduates were demanded. Admission requirements were flexible, but a high standard of performance was enforced. The degree of Bachelor of Arts was granted after three years of study. Student programs were heavier than was common elsewhere. The liberal ideas of Mr. Clark and the trustees were effectively developed in the educational program presided over by Carroll Davidson Wright, who had resigned as first United States Commissioner of Labor to serve as President of Clark College until his death in 1909. He was succeeded by Edmund Clark Sanford, then Professor of Psychology in the Graduate School.

Upon the resignations of Presidents Hall and Sanford in 1920, Wallace Walter Atwood, Professor of Physiography at Harvard University, became president of both the graduate and undergraduate departments of the University. The election of President Atwood marked the addition of geography at the graduate level to the instructional obligations of the University. The Graduate School of Geography, with President Atwood as Director, was organized to function within the general framework of the graduate department.

Significant changes were effected also in the College. The normal period of residence required for the degree of Bachelor of Arts was increased from three years to four. Participation in intercollegiate activities was encouraged. The physical equipment of the University was increased. In 1941, a program leading to the degree of Bachelor of Business Administration was introduced under the direction of the Division of Business Administration. Also in 1941 the Women's College of Clark University was established by the trustees of the University, and since the fall of 1942, women have constituted an integral part of the undergraduate student body. The academic requirements are the same for women and men.

In 1946 President Atwood was succeeded by Howard Bonar Jefferson who, at the time of his selection, was Professor of Philosophy and Director of the School of Philosophy and Religion at Colgate University.

Worcester and the University

When plans for the new University were taking shape in Mr. Clark's mind, he enlisted the aid of a group of far-sighted and influential Worcester citizens from whom, later, the majority of his original Board of Trustees was chosen. In this was set a pattern for cooperation between the University and the community which has persisted throughout the history of the institution. The intellectual life of the city has been enriched by the contributions of the faculty and of distinguished guests whom the University has brought to Worcester. Members of the staff have served local institutions, both public and private, in many ways. The college has opened the door to higher education for hundreds to whom the opportunity would have been denied if they had been forced to seek it elsewhere, while the graduate school has aided the more gifted to proceed to the highest levels of intellectual endeavor. Particularly noteworthy has been the service to teachers in the public school system.

On the other hand, the University has benefitted by the support, both financial and intangible, which it has received from the citizens of Worcester. The interchange of services and ideas with the staffs of other Worcester institutions and the opportunity to use their libraries on a reciprocal basis have been invaluable. There is particularly close coöperation between the Department of Fine Arts and the Worcester Art Museum, between the Department of History and International Relations and the American Antiquarian Society, and between the Department of Psychology and Education and the Worcester State Hospital. The Worcester Public Library and the University Library coöperate by avoiding duplication in the coverage of certain subjects and by a corresponding widening of the coverage in the fields assigned to each.

In short, the University is conscious that it is a part of the community and that, as such, it has both obligations and benefits. Its steadfast purpose is to strengthen the pattern of mutual interdependence and coöperation.

Organization

The University includes:

At the graduate level:

THE GRADUATE SCHOOL offering instruction leading to the degrees of Master of Arts and Doctor of Philosophy.

THE GRADUATE SCHOOL OF GEOGRAPHY offering instruction leading to graduate degrees in Geography.

THE GRADUATE DIVISION OF INTERNATIONAL AFFAIRS offering instruction leading to graduate degrees in International Affairs.

At the undergraduate level:

THE COLLEGE FOR MEN (Clark College) offering a general college course leading to the degree of Bachelor of Arts.

THE COLLEGE FOR WOMEN offering a general college course leading to the degree of Bachelor of Arts.

THE UNDERGRADUATE DIVISION OF BUSINESS ADMINISTRATION offering, to both men and women, vocational training, leading to the degree of Bachelor of Business Administration.

THE LIBRARY with an endowment separate from the endowment of the teaching branches of the University.

THE ART COLLECTION, separately endowed for the preservation and expansion of the Art Collection of the University.

THE CLARK UNIVERSITY PRESS, associated with the University for the publication of scientific books and journals.

Buildings and Grounds

The University Campus is situated on Main Street about a mile and a quarter from the business center of Worcester. The administrative and educational activities of the University are centered here. On adjacent property facing the campus on Woodland Street, are dormitories, the dining hall, and residences of the President and of the Dean of the College. There is a small athletic field opposite the campus on Maywood Street, providing tennis courts and a running track. A larger field, at the corner of Beaver Street and Park Avenue, is used for soccer, baseball, and other sports. The Hadwen Aboretum, the gift of Mr. O. B. Hadwen, is a tract of about twenty acres at the intersection of Lovell and May Streets.

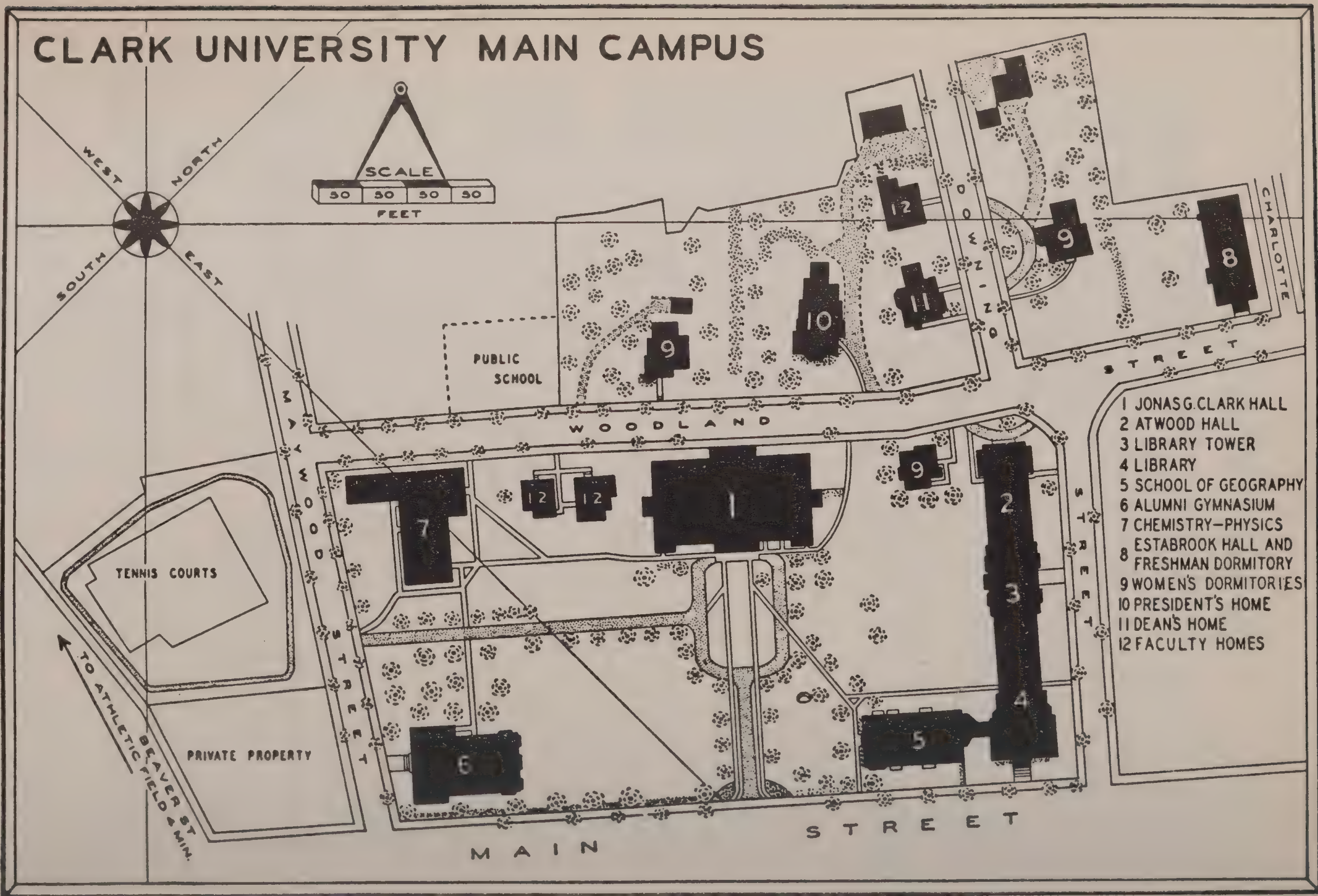
The Main Building (Jonas G. Clark Hall), completed in 1889, is a four-story, granite and brick structure containing about ninety rooms. It houses the general academic offices of the University and the offices and classrooms of most of the departments of instruction.

The Science Building, also completed in 1889, houses the Departments of Physics and Chemistry in a solidly built brick structure with interior partitions of brick.

The Library Building, completed in 1903, marked a departure from the style of the older buildings. Its design, which has been followed in all of the later University buildings, is a modern adaptation of the Gothic, using brick as the contruction material.

The original building, at the corner of Main and Downing Streets, was enlarged in 1910 by the addition of a wing extending along Main Street. This wing is now used partly for library purposes and also houses the President's office and Graduate School of Geography. A second addition to provide for the growing book collections was added to the library in 1939. This is in the form of a tower which connects the Library Building with Atwood Hall.

Atwood Hall has its entrance on Woodland Street and extends along Downing Street to join the library tower. It provides an auditorium with a seating capacity of 850, which is used for weekly



CLARK UNIVERSITY MAIN CAMPUS

SCALE
50 50 50 50
FEET
NORTH
EAST
SOUTH
WEST
PUBLIC SCHOOL
TENNIS COURTS
PRIVATE PROPERTY
TO ATHLETIC FIELD 4 MIN.
BEAVER ST
MAYWOOD STREET
WOODLAND STREET
DOWNING STREET
CHARLOTTE
MAIN STREET
1 JONAS G. CLARK HALL
2 ATWOOD HALL
3 LIBRARY TOWER
4 LIBRARY
5 SCHOOL OF GEOGRAPHY
6 ALUMNI GYMNASIUM
7 CHEMISTRY–PHYSICS
8 ESTABROOK HALL AND FRESHMAN DORMITORY
9 WOMEN'S DORMITORIES
10 PRESIDENT'S HOME
11 DEAN'S HOME
12 FACULTY HOMES

college assemblies, dramatic performances, the Fine Arts Course, and other University functions. It is also used for public gatherings.

THE ALUMNI GYMNASIUM, completed in 1938, is at the corner of Main and Maywood Streets. It provides a playing floor of ample size with seats for 800 spectators. The Gymnasium also contains a comfortable lounging room which provides a convenient and attractive meeting place for various University organizations.

ESTABROOK HALL, at the corner of Woodland and Charlotte Streets, provides dormitory accommodations for men and contains the University Dining Hall.

There are at present three women's dormitories, all located on Woodland Street near the campus. These accommodate about fifty women.

The Library

ALBERT C. GEROULD, *Librarian*

HELEN J. ELLIOT, *Cataloger*

MARION HENDERSON, *Reference Librarian*

GUY BURNHAM, *Map Librarian*

VIRGINIA M. BRIGGS, *Junior Librarian*

THE LIBRARY, under the terms of the founder's will, was provided with a separate endowment which partly covers its cost of operation and also provides a book fund amounting currently to over $16,000.00. The Library amounts to some 200,000 volumes and receives currently some 700 periodicals and newspapers. Its holdings of periodicals in the fields of psychology and geography are particularly noteworthy.

The Library owns some 27,000 maps and 800 recordings.

Mr. Clark's personal collection of books, paintings and other works of art was willed to the University as a separate endowment together with the sum of $100,000 as an endowment for its maintenance and increase. A series of eight beautiful stained glass windows by

Joseph Reynolds, Jr., one of the most noted stained glass craftsmen in the country, have been added to the collection. Each of these represents a phase of teaching at the University.

Under the will of the late Colonel William Libbey, for many years professor of Geography at Princeton who died in 1927, the University was the recipient of his distinguished collection of books and periodicals.

The personal library of President Hall was left by him to the University and is now housed in the offices of the Department of Psychology and Education.

ART COLLECTION

LORING HOLMES DODD, *Curator*

A room in the Library is set aside to display a selection from Mr. Clark's paintings and his most valuable books. This room also serves to house the Library's phonograph and collection of recordings most of which were given by the Carnegie Corporation.

Admission

Three classes of students are accepted in the University:

1. GRADUATE STUDENTS, candidates for the degrees of Master of Arts and Doctor of Philosophy; also other mature persons with the necessary educational background. See announcement of the Graduate Schools.

2. UNDERGRADUATES, candidates for the degrees of Bachelor of Arts and Bachelor of Business Administration. Such candidates may be full time or part time students. See announcement of the undergraduate Colleges.

3. PART TIME STUDENTS, candidates for an undergraduate degree who for some reason cannot carry more than three courses at a given time.

4. SPECIAL STUDENTS, persons, not prospective candidates for a

degree, who wish to take advantage of the opportunities for study provided by the University and who give satisfactory evidence of adequate preparation for the work which they wish to undertake.

A holder of a bachelor's degree who wishes to enroll in a graduate course (a course designated by a number beginning with "2" or "3") is not eligible for classification as a special student. Such persons come under the jurisdiction of the Graduate Board.

Special students are under the supervision of the College Board.

AUDITORS may be admitted at the discretion of the administrative officers of the University. They are not enrolled as students in the University and do not pay the matriculation fee.

The University reserves the right to require the withdrawal at any time of any student whose record in either conduct or scholarship fails to meet the expectations implied by his admission.

Requests for information and for application forms to the College should be addressed to THE DEAN, CLARK UNIVERSITY, 950 MAIN STREET, WORCESTER (3), MASSACHUSETTS. Similiar requests for the Graduate School should be addressed to the chairman of the department in which the applicant is interested.

The Academic Year

The academic year for 1948-49 is thirty-three weeks long, divided into two approximately equal semesters. This period is supplemented by a twelve-week summer term.

The academic year for 1949-1950 will be 34 weeks long, divided into two 17-week semesters.

The academic year begins on the Monday before the fourth Thursday in September and ends, in 1949-50, on the Saturday before the thirty-eighth Monday.

The accelerated twelve-week summer term, introduced to make it possible for an undergraduate to complete the requirements for a bachelor's degree in three calendar years or less, will be discontinued after the 1949 term.

Students are expected to be present on the first day of each term and to continue in attendance from day to day to the end of the term.

Tuition and Other Expenses

In accordance with the express wish of the founder, the University has consistently aimed to keep its tuition and other fees as low as possible. The tuition has been raised from time to time in response to urgent need, but is still well below that charged by many similar institutions.

MATRICULATION FEE

A matriculation fee of $5.00 is required of all regularly enrolled students in Clark University.

Auditors are not required to pay the matriculation fee.

Official statements of record are issued by the Recorder for matriculated students only.

TUITION

The regular academic year. Tuition for undergraduates with programs of four or five courses is $400* for the academic year. Undergraduates and special or part time students who enroll for fewer than four or more than five courses pay $80 per course, $40 per half course. (For definition of a course and half-course, see Requirements for the Degree of Bachelor of Arts.)

Each undergraduate and special student carrying four or more courses pays also a yearly activities fee of $20 which is collected with the tuition.

Tuition for graduate students with normal programs, excepting those in the Clinical Training Program in Psychology, is $400 per year. Graduate students who enroll for less than a full program are charged at the rate of $80 per course.

Tuition for students in the Clinical Training Program in Psychology is $500 for the academic year.

One half of the annual tuition, laboratory and activities fees is collected at the beginning of each semester.

If tuition is not paid within ten days after the beginning of a semester the enrollment of the student lapses. A student whose enrollment has thus lapsed may be re-enrolled, with the permission of the proper administrative officer, on payment of the overdue tuition with an additional fee of $2.

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*Tuition was increased from $380 to $400 Feb. 4, 1949, effective with the 1949-1950 academic year, beginning Sept. 19, 1949.

Summer term. Tuition in the summer term, with a normal program of two subjects, is $76* for each session of six weeks. Tuition is charged at the rate of $76 per course, $38 per half-course for other programs.

Tuition is due and payable at any time before 5 P.M. of the Thursday following the beginning of each session of the summer term.

REFUND OF TUITION

The following regulation was adopted by the trustees on March 28, 1931:

"No refund of tuition and no release of obligation to pay tuition shall be made because of failure for any reason on the part of a student to complete the work of any semester after it is begun."

LABORATORY FEES AND DEPOSITS

Laboratory fees, payable at the time of registration, are charged in undergraduate laboratory courses as follows:

$10-$30 for each course.

$5-$15 for each half-course.

A breakage deposit is required in all undergraduate laboratory courses in chemistry. These deposits are collected by the Bursar, at the time of registration, according to the following schedule:

$30 for any two of the above courses taken concurrently.

$10 for each course, excepting those listed above.

$5 for each half-course, excepting those listed above.

The Bursar returns any unused balance or collects any charge for breakage in excess of the deposit, after the course is completed.

Graduate students taking undergraduate courses pay the same fees and deposits as undergraduates.

A deposit of $25 is required at the beginning of the year from each graduate student in the department of chemistry. Ordinary supplies and materials are charged to the student's account at cost. Any balance remaining is refunded at the end of the year.

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*Tuition will be increased to $80 per course and $40 per half course at the opening of the 1949-1950 academic year Sept. 19, 1949.

DIPLOMA FEES AND PUBLICATION FEES

For a bachelor's degree, the diploma fee, $5, is due at the beginning of the term in which the candidate expects to complete work in residence for the degree.

For a master's degree, the publication fee, $10, and the diploma fee, $10, are due when formal application for admission to candidacy for the degree is filed.

For the degree of Doctor of Philosophy, the publication fee, $15, and the diploma fee, $25, are due when formal application for admission to candidacy for the degree is filed.

MISCELLANEOUS FEES

Each freshman pays an induction period fee of $5.00.

The activities fee is $20.00.

Graduate students who use the gymnasium pay a fee of $10 per year.

Graduate students in geography pay, in addition to the regular tuition, a camp fee, a workroom fee and a classroom-materials fee. For details see the announcement of the Graduate School of Geography.

Students who elect Fine Arts 1 pay a fee of $10 in addition to the regular tuition.

Students who elect History 10 pay a fee of $1 in addition to the regular tuition.

DINING HALL

Board at the dining hall is furnished at a reasonable rate which has varied from year to year. During the current year the charge is $9.50 per week, with *no refunds for absences except in cases of protracted illness.*

With the opening of the 1949-1950 academic year Sept. 19, 1949, the dining hall charge becomes $10.50 per week.

Undergraduates who do not live in their own homes are required to board at the dining hall. This fact must be recognized and subscribed to by all who seek admission. Board is payable *in advance* by the week, month or semester.

DORMITORIES

Freshman men not living in their own homes or with near relatives are required to room in Estabrook Hall.

Women students who do not live in their own homes or with near relatives are required to room in one of the Women's Dormitories.

The charges for rooms in Estabrook Hall are as follows:

For all rooms, except those on the mezzanine floor:
- Suite of two rooms occupied by two men, $140 per year for each occupant.
- Suite of two rooms occupied by one man, $165 per year.
- Single room occupied by two men, $120 per year for each occupant.
- Single room occupied by one man, $150 per year.

For rooms on the mezzanine floor:
- Single room occupied by two men, $125 per year for each occupant.
- Single room occupied by one man, $150 per year.

The charges for rooms in the Women's Dormitories are as follows:
- Single room occupied by one student, $165 per year.
- Double room, $125 per year for each occupant.
- Triple room, $100 per year for each occupant.

Dormitory room rent is payable either in advance or one-fifth at the beginning of each semester and one-tenth on the first day of November, December, January, March, April and May. Each student is required to deposit $25 before occupying a room. This deposit is returned, less a charge for lights and for any damages to the room or its furnishings, after the key to the room is surrendered to the Bursar.

Rooms are assigned to freshmen in order of application, when the application is accompanied by the deposit of $25. Students who indicate a desire for a room together will be accommodated whenever possible. Rooms not required for freshmen may be rented by upper classmen or by graduate students. No such vacancies have existed in recent years.

COLLEGE EXPENSES—SUMMARY

A student in the college who lives in the dormitory and boards at the dining hall will find that the necessary cost for a college year (September to May) is about $975 in addition to personal expenses.

This expense is distributed as follows:

Annual fees	
Tuition†	$400.00
Room rent*	100 to 165.00
Board (34 weeks at $10.50)	357.00
Activities Fee	20.00
Laboratory fees (estimated)	5.00 to 30.00
Books and supplies (estimated)	50.00
Total	$932.00 to 1022.00
Non-recurring fees, collected in the first year only	
Matriculation fee	$5.00
Induction period fee	5.00

Fellowships, Scholarships and Student Aid

In addition to the fellowships and scholarships provided by the University from endowed funds and other sources there are available throughout the United States numerous scholarships and fellowships supported by philanthropic foundations, fraternal organizations or large commercial enterprises. These are frequently awarded competitively on a nation-wide or a state-wide basis.

A great many scholarships, especially at the college level, are provided by local sources of various kinds. Any person who is interested in, or dependent on, aid in the form of fellowships and scholarships for the furtherance of his education may find it advantageous to inquire about such offerings from school officials, churches, fraternal organizations, chambers of commerce, etc.

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*Rent in Quonset huts is at the rate of $2.50 per week.

†On Feb. 4, 1949, the Board of Trustees voted that effective with the opening of the 1949-1950 academic year Sept. 19, 1949, tuition is increased from $380 to $400, board is increased from $9.50 to $10.50 a week and room rent is increased from $90-$150 to $100-$165.

Loans for educational purposes are also available from similar sources.

GRADUATE FELLOWSHIPS, SCHOLARSHIPS AND ASSISTANTSHIPS

Graduate fellowships and scholarships are available for prospective candidates for the degrees of Master of Arts and Doctor of Philosophy at Clark University. Appointments are made on the basis of scholarly promise and seniority and on the recommendation of the departments. The number of appointments available in any department vary from year to year. Fellows and scholars are expected to coöperate with the staffs of the various departments, and may by mutual agreement undertake limited responsibilities. They are never called upon to perform services which would interfere with the completion of a full-time program of graduate study.

Teaching fellowships are available in certain departments. These involve a specified amount of instruction with stipends which vary according to the amount of service agreed upon.

Stipends for graduate fellowships are provided by the income of the George Hoar Fund which was given to the University by Andrew Carnegie, and from other special funds.

Assistantships are available in several departments. These positions involve a variety of services with stipends to correspond, and usually provide the student with experience which will be useful in his later professional work.

Appointments to fellowships and scholarships are announced about April first in accordance with an agreement among the members of the Association of American Universities. Assistants may be appointed at any time.

Inquiries concerning any of the above types of appointment should be addressed to the chairman of the department concerned.

STUDENT AID FOR GRADUATE STUDENTS

Student aid is available from the following funds, with the restrictions noted.

The John White Field Fund. This fund of five hundred dollars was established by Mrs. Eliza W. Field. The income is to provide for the minor needs of a scholar or fellow.

THE GEORGE S. BARTON FUND. The income from this fund of five thousand dollars is devoted to aid some one or more worthy native born citizens of the City of Worcester.

THE ELIZA D. DODGE FUND. The income of this fund of one thousand dollars is granted to graduate students of limited means who are engaged in research work.

THE CHESTER BLAND FUND. The income of this fund is preferably used to provide aid to a promising student, either in residence or engaged in research elsewhere under the direction of the department of History and International Relations. It may also be used to defray the expense of visiting lecturers or of departmental research.

THE MORTON L. "SONNY" LAVINE FOUNDATION. The income from this memorial to Lieutenant Lavine of the United States Army, World War II, is to be used in the promotion of research in the Department of History and International Relations. The fund amounts to $1000.

ALUMNI ASSSOCIATION FUND. This scholarship fund for the benefit of students who are studying for the degree of Doctor of Philosophy was provided by alumni who hold that degree.

LOANS FOR GRADUATE STUDENTS

Loans are available for graduate students from the following funds. These loans bear interest at four per cent per year.

ALUMNI LOAN FUNDS. Loans from these funds are available on suitably endorsed notes. Applications require the approval of the student's major department, the Committee on Credentials of the Graduate Board, and the chairman of the Alumni Loan Fund Committee.

THE MARY S. ROGERS SCHOLARSHIP AND LOAN FUND has been able, since its founding in 1926, to care for every need for loans in the Graduate School.

The Sarah M. Thurber Loan Fund was established by the late Dr. Charles H. Thurber, former president of the Board of Trustees, as a memorial to his mother. This fund is administered by the president of the university.

UNDERGRADUATE SCHOLARSHIPS

Undergraduate scholarships are generally awarded on the basis of pecuniary need with due regard to character and ability. Such scholarships are provided from a variety of sources and vary in amount. Some of them are restricted to residents of a definite locality, or to those studying particular subjects.

Scholarships are awarded at the beginning of each semester. Ordinarily a scholarship for the first semester will be continued through the second semester if the recipient maintains a scholarship record which places him in the upper half of his class.

To be eligible for a scholarship award an entering student must have had a scholarship average which placed him in the upper third of his class, for his course. To be eligible for a scholarship in college a student must have maintained an average in the upper half of his class for the preceding semester.

Applications for undergraduate scholarships should be filed at an early date on forms which may be secured from the college office.

The Jonas G. Clark Scholarships, established by the trustees, provide either full tuition or half tuition for undergraduate male and female students from outside of Worcester.

The Theodore T. and Mary G. Ellis Scholarships provide either full tuition or half tuition for male or female residents of Worcester who are students in "the collegiate department of Clark University."

The Sanford Memorial Scholarship Fund, established by alumni of the university in honor of Edmund C. Sanford, president of Clark College from 1909 to 1920, provides an annual scholarship amounting at present to $200 for a male undergraduate.

The Livermore and Ambulance Scholarship was endowed by citizens of Worcester in honor of Charles Randall Livermore, the first Clark man to fall in battle in the first World War, and of his companions in the Clark Unit of Ambulance Drivers. Fifty dollars or more is awarded annually on the basis of academic success, character, and usefulness to the college. This scholarship is for male undergraduate students who are residents of Worcester County.

The Henry A. Willis Fund provides scholarships for male students from Fitchburg, Massachusetts, and vicinity. In the absence of suitable candidates from this community grants may be made to others.

The Helen Brewster Randolph Memorial Scholarship Fund, established by the late Professor Charles B. Randolph, provides about $250 annually for scholarships for male college students, preferably those whose "major" is a foreign language.

The Gordon A. Hubley Scholarship Fund was bequeathed by Alice B. Hubley in memory of her son, a graduate of the college in the class of 1910. The income is to be used for the assistance of male undergraduates who are residents of Worcester.

The B'nai Brith Scholarship, provided by the Worcester Chapter, Order of B'nai Brith, is primarily but not exclusively for the aid of Jewish students.

The Probus Club of Worcester offers an annual scholarship of one hundred dollars.

The Harry G. Fager Scholarship of the Odin Club is awarded annually to some young man who possesses superior scholarship and personality, has limited means and is of Scandinavian blood. This scholarship, $200, is awarded every second year to a student at Clark University.

The Clark University Faculty Women's Club offers scholarships to undergraduate students, either men or women, who rank high in intellectual and personal qualities.

The Clark University Alumnae Association customarily offers two scholarships to students in the Women's College.

Aid given in the form of scholarships is not regarded as a loan. It is recognized, however, that those who receive such aid may wish to return the amount in later years. Any sums received from this source will be added to the Alumni Loan Fund of the College or to any designated scholarship fund.

UNDERGRADUATE LOANS

Loans are covered by endorsed notes payable at a fixed date and bear interest at the rate of 4 per cent per year. Interest received from loans is in all cases added to the fund from which the loan was made.

Loans from the funds described below are made to undergraduates by the Dean of the college in coöperation with the Alumni Committee on Loans.

THE ALUMNI LOAN FUND is a permanent revolving fund established by the trustees and the alumni. To this has been added a fund of about $500 contributed by L. Kelly Foster, C. B. L. Kelley, Isador Lubin, H. M. Smith, and others.

THE ESTABROOK LOAN FUND was created by the generosity of the late Arthur F. Estabrook of the Board of Trustees.

THE HASKELL TALAMO LOAN FUND has been established by relatives and friends of the late Doctor Haskell Talamo, A.B., Clark University, 1916.

THE LOUIS N. WILSON FUND, established by the first librarian of Clark University, is a loan fund for male students in the college.

GRADUATE AND UNDERGRADUATE PROGRAMS

THE GRADUATE SCHOOL

THE GRADUATE SCHOOL OF GEOGRAPHY

THE GRADUATE DIVISION OF INTERNATIONAL AFFAIRS

THE MEN'S COLLEGE (Clark College)

THE WOMEN'S COLLEGE

THE DIVISION OF BUSINESS ADMINISTRATION

The Graduate School

Admission to the Graduate School is open to properly qualified persons, both men and women. Instruction and opportunities for study leading to the degrees of Doctor of Philosophy and Master of Arts are offered in the following subjects:

Chemistry
Economics
Geography
History
International Affairs
Psychology

Work leading to the degree of Master of Arts is also offered in the following subjects:

Biology
Education (Master of Arts in Education)
Physics

Courses of an advanced nature in other subjects may, with the consent of the Graduate Board, be included in the programs of graduate students.

ADMISSION TO THE GRADUATE SCHOOL

Admission is granted only by the Graduate Board on recommendation of a department.

Application. A prospective applicant should communicate with the department in which he expects to do his major work. If he is encouraged by the department to make application, he will receive the application blanks and should submit them to the chairman of the department with an official transcript of undergraduate work, letters of recommendation from two persons who are competent to judge his qualifications, and a recent photograph (passport size preferred).

In addition, applicants for admission to the graduate school are strongly urged, and may be required, to submit a record of attainment in the Graduate Record Examination. This examination tests general knowledge in the field of study covered by the curriculum of the liberal arts college, and requires no special preparation. It is useful as an indication of the general preparation of the student, and as a guide in planning his course of study.

Admission. In granting admission, the Graduate Board may, with the advice of the department, prescribe a minimum period of residence, never less than one year, and other definite requirements, including courses in particular subjects, as prerequisites for a graduate degree. Admission to the Graduate School does not in any way imply admission to candidacy for a degree. Admission to the Graduate School is granted for entry only at a specified time, and lapses if the student fails to enter at that time. If, after an applicant has entered as a regular student, his period of graduate study is broken by more than a year, he must make formal application for reinstatement.

Admission of seniors to graduate courses. Seniors in Clark College who rank in the upper third of their class may, in exceptional cases, be admitted to courses primarily for graduate students only after a special vote of the College Board and the approval of the secretary of the Graduate Board.

SCHOLARSHIPS, FELLOWSHIPS, AND STUDENT AID

Scholarships and fellowships are available for prospective candidates for the degrees of Master of Arts and Doctor of Philosophy respectively. Application for a scholarship or fellowship should be made before March first to the chairman of the department in which the applicant expects to do his major work. Applications, after being endorsed by the departments, are acted upon by the Graduate Board.

According to an agreement of members of the Association of American Universities, the elections of fellows and scholars will be communicated on April first, but not before, to each member of the Association and to each successful candidate.

Some fellowships are designated as research fellowships or teaching fellowships, with the consent of the applicant and on the recommendation of the department, in cases where research or teaching assistance in the department is to be a duty of the fellow.

Assistantships are available in certain departments. Appointments to these positions are usually made from the list of fellows. Application should be made to the chairman of the department.

Stipends for fellows and scholars, other student aid and educational loans for graduate students are provided by the income of special funds which are listed elsewhere under the heading, "Fellowships, Scholarships and Loan Funds."

THE DEGREE OF MASTER OF ARTS

An academic year of full-time study in residence, or its strict equivalent in summer sessions and part-time study, is a minimal requirement for a master's degree. Residence study is broadly defined as graduate work done at Clark University under the immediate personal supervision of at least one member of the university faculty.

A reading knowledge of a foreign language, usually French or German, may be required of candidates for the degree of Master of Arts at the discretion of the major department.

Application for admission to candidacy for a master's degree should be filed with the Secretary of the Graduate Board not later than the first week of the last full semester which the student expects to spend in residence as a candidate for this degree. Applications will be considered by the Graduate Board when the student has:

1. Completed one semester of full-time graduate work or its equivalent in residence at this university;
2. Paid the diploma fee ($10) and publication fee ($10);
3. Obtained the written endorsement of his major department.

Candidacy for the degree of Master of Arts will, unless extended by action of the Graduate Board, hold good for three years from the date of admission to candidacy. For satisfactory reasons, candidacy may be extended once for an additional period of three years by vote of the Graduate Board. When the candidacy expires without the degree having been awarded, the diploma and publication fees, less any expenses incurred, are returned.

Each student must meet a minimal course requirement of five courses, or their equivalent in half courses. The program must be approved by the major department. One of the courses may be a research course devoted to the preparation of the thesis. The thesis will be written on a topic in the field of the student's special interest under the supervision of a member of his major department. A copy of the thesis, together with two copies of an abstract, both approved by the supervising instructor, must be deposited in the Recorder's office not later than three weeks before the date of the commencement at which the degree is to be conferred. The abstract must not exceed 600 words in length. The thesis and one copy of the abstract are deposited by the Recorder in the University Library. Each candidate must make a satisfactory record in such written examinations as may be required by the major department, and in a final oral examination by a committee of three or more, two of whom must be members of the Graduate Board.

THE DEGREE OF DOCTOR OF PHILOSOPHY

Only such candidates as give evidence of general proficiency, power of investigation, and high attainments in the special field in which their major subjects lie will be encouraged to proceed to the degree of Doctor of Philosophy.

Foreign languages. A prospective candidate for the doctor's degree is advised to prepare himself early for the oral examinations in the reading of modern foreign languages. French and German are required except in cases where the Graduate Board may authorize the substitution of another language for one of these. A student must pass the foreign language examinations before he will be permitted to take the preliminary examination for the degree of Doctor of Philosophy. These examinations are conducted by a committee composed of representatives of the modern language departments and a representative of the student's major department. The committee reports the results of the examination to the Recorder. Additional lanaguage requirements may be imposed by the student's major department.

Admission to candidacy. Applications for admission to candidacy must be filed not later than November first in any academic year, by students who hope to receive the degree at the end of that academic year. An application for admission to candidacy will be considered by the Graduate Board when the applicant has:

1. Completed two full academic years of graduate work (or its equivalent in part-time work), one of which must be at Clark University;
2. Passed the required examinations in foreign languages;
3. Passed a preliminary examination in his chosen fields of study;
4. Paid the diploma fee ($25) and publication fee ($15);
5. Obtained the written endorsement of his major department.

Candidacy for the degree of Doctor of Philosophy holds good for three years from the date of admission to candidacy. For satisfactory reasons, candidacy may be extended once for an additional period of three years by vote of the Graduate Board. When candidacy expires without the degree having been awarded, the diploma and publication fees, less any expenses incurred, are returned.

Dissertation. A dissertation which is expected to make an original contribution to some special field of knowledge is required of each candidate.

The dissertation, with comments of the chief instructor and other readers, is laid before the examining committee at the final oral examination.

An abstract of the dissertation, approved by the instructor under whom it was written and not exceeding 1200 words in length, is also required.

Two copies of the dissertation and three copies of the abstract must be provided in a form which is prescribed and each copy must be signed by the chief instructor.

Four weeks before the date of the Commencement at which the degree is to be conferred, one completed copy of the dissertation and two copies of the abstract must be deposited in the office of the University Recorder. This copy of the dissertation and one copy of the abstract are deposited in the University Library where they remain permanently.

At the same time a second copy of the dissertation and a copy of the abstract must be delivered to the major department. These may be retained in the department or deposited in the library for loan purposes.

Final examination. The final examination is oral and lasts for at least two hours; additional written examinations may be given if the major department so directs. The candidate is expected to defend his dissertation and, at the discretion of the examining committee, may be questioned on the entire special field of his study. The oral examination is conducted by a committee of at least four members, including the chairman and one other member of the major department, a member of the Graduate Board under whom the candidate has done no work, and such other members of the Graduate Board as may be duly appointed. The president of the university is authorized to invite any person from within or without the university to be present and to assist in the examination.

The Graduate School of Geography

SAMUEL VAN VALKENBURG, PH.D., Director of the Graduate School of Geography and Professor of Geography.

W. ELMER EKBLAW, PH.D., Professor of Geography; Editor, *Economic Geography.*

RAYMOND E. MURPHY, PH.D., Professor of Economic Geography.

RICHARD J. LOUGEE, PH.D., Associate Professor of Physiography.

HENRY J. WARMAN, PH.D., Associate Professor of Geography; Secretary of the Graduate School of Geography.

GUY H. BURNHAM, A.M., Cartographer and Instructor in Geography.

VISITING PROFESSORS AND SPECIAL LECTURERS, 1948-49

HANS BOESCH, PH.D., Department of Geography, University of Zurich, Zurich, Switzerland.

W. W. ATWOOD, JR., PH.D., Research and Development Board, Washington, D. C.

ARTHUR B. BEAUMONT, PH.D., Specialist in Soil Conservation, University of Massachusetts, Amherst, Massachusetts.

SIDMAN POOLE, PH.D., Department of Geography, University of Virginia, Charlottesville, Virginia.

JOHN C. AYERS, PH.D., Oceanographer, Woods Hole Oceanographic Institution

HARRY J. TURNER, JR., M.A., Oceanographer, Woods Hole Oceanographic Institution

ERWIN RAISZ, PH.D., Harvard University; Special Lecturer in Cartography.

The Graduate School of Geography offers opportunity to properly qualified students for advanced training in geography. The map collection, libraries, and special laboratories for cartography and interpretation of aerial photographs, provide unusual facilities for research work in residence. The staff, composed of specialists in their various fields of geography, must spend part of their time in travel and field studies. While in residence, they offer regular courses of instruction and direct advanced students in research work. Special lecturers, both American and foreign, supplement the regular staff. Not all courses of instruction are offered each year; many are given in alternate years. All graduate students are encouraged to undertake independent field studies as part of their university work.

GRADUATE WORK IN THE SCHOOL OF GEOGRAPHY

Work is offered leading to the degrees of Master of Arts and Doctor of Philosophy in Geography. Candidates for the master's degree will pass written examinations in at least six of the following fields: physiography, climatology, soils and land utilization, plant geography, economic geography, human geography and cultural geography, regional geography, and political geography. The oral examination for the master's degree covers four fields approved by the Staff. The master's degree requires two years except for those whose preparation has been adequate enough in fundamentals to enable them to qualify in less time.

Candidates for the doctor's degree in geography will pass written examinations in the above fields, and a general oral examination covering six major fields approved by the staff. In general, a year of work beyond the master's degree should prepare a candidate for the general examination preliminary to his acceptance as a candidate for the doctor's degree and to his concentration work for his dissertation. This year of course work may well include, besides certain advanced courses in geography, related advanced studies in biology, economics, history and international relations chosen from the following: botany (Biol. 14); economic history (Ec. 12); economic statistics (B.A. 16); international trade, theory and finance (Ec. 27a); international economic policies (Ex. 31); The Modern Far East (Hist. 274b).

THE FIELD CAMP

A distinctive feature of the Graduate School of Geography is the autumn field camp of three weeks' duration at the beginning of the fall term. All resident prospective candidates for graduate degrees in geography are expected to attend the field camp each autumn. The field program includes studies in physiography, land utilization, industrial geography and weather observations, with special training in mapping and other field techniques. Cars, scientific instruments and other equipment are provided. Suitable field clothing and blankets must be provided by the individual student. Following return to the campus, about ten days are allowed for completion of field reports. Formal course work begins on the second Monday after the close of the field camp.

Formal course work in geography ends about May 1st, leaving students free to read and to coördinate their work prior to the examination period.

STUDENTS' FEES

All geography students in residence must pay in addition to the general university fees, the camp fee, the workroom fee, and the classroom-materials fee.

The camp fee, determined on a cost basis, varies between $50 and $80, payable to the camp director on or before the first day of camp. For a student taking the field course only, the tuition fee is $25 in addition to the camp fee. The camp fee covers board and lodging, transportation, maps, drafting supplies and the use of meteorological instruments and other equipment for the three weeks' period.

The workroom fee, $5 a semester, is payable to the department November 1st and March 1st. It helps maintain the geography workroom and equipment used by graduate students—alcove desks, files of maps, card catalogue, drafting tables and instruments, and adding machines.

The classroom fee, $5 a semester, is payable November 1st and March 1st to the department. It is for mimeographing and for the maintenance, in part, of the classroom wall maps and other equipment, and for the expense of meteorological materials.

COURSES IN GEOGRAPHY

The following courses were given in 1948-49. The numbers indicate courses as described under "Geography" in the alphabetical list of departments and courses of instruction unless other information is given.

10, 12, 383a, b, 182a, 20b.	Mr. Warman
16, 36, 387b, 361a.	Mr. Murphy
201, 32, 300, 27a.	Mr. Van Valkenburg
33b, 27b.	Mr. Ekblaw
18. Geography of New England given as a year course in 1948-49. 315.	Mr. Lougee
191, 291.	Mr. Burnham
30. Seminar.	Staff
300. Ph.D. Seminar.	Mr. Van Valkenburg
311b. Oceanography.	Mr. Turner and Mr. Avers
399a. Field Studies.	Staff
391.	Visiting Professor Raisz

Courses in Geography which are to be offered in 1949-50 will be found listed, with descriptions, under "Geography" in the list of Departments and Courses of Instruction.

The Graduate Division of International Affairs

GEOGRAPHY, DIPLOMACY, ECONOMICS

ADMINISTRATIVE COMMITTEE

JAMES A. MAXWELL, *Professor of Economics.*

SAMUEL VAN VALKENBURG, *Director of the Graduate School of Geography*

DWIGHT E. LEE, *Professor of Modern European History*

The Graduate Division of International Affairs aims to meet a demand for graduate work which will be devoted entirely to the general field of international affairs and which will include work in geography, history and international relations, and economics. This division groups together appropriate courses and seminars in order to prepare graduate students for the government service of the United States, college and university professorships in international affairs, posts in corporations and banks doing foreign business, and research and administrative positions in the field of world affairs. The courses include offerings in political, regional and economic geography; foreign trade, commerce, and finance; international law; modern and diplomatic history; and the foreign policy and international relations of the United States.

ADMISSION

Qualified graduate students who are interested in International Affairs are admitted either in the Department of History and International Relations or in the Department of Economics and Sociology or in the Graduate School of Geography. Inquiries and applications may be addressed to any one of them.

PROGRAMS

Programs in International Affairs are adjusted to the special interests of the individual students. Programs are arranged in consultation with the staff and require the approval of the committee in charge of the division.

The Men's College

CLARK COLLEGE

The college offers a general program leading to the degree of Bachelor of Arts, and a vocational program leading to the degree of Bachelor of Business Administration.

ADMISSION TO THE FRESHMAN CLASS

Inquiries regarding admission and requests for blank forms should be addressed to the Dean of the College, Clark University, Worcester 3, Mass. Application for admission should preferably be made either at the end of the junior year or immediately at the end of the first semester of the senior year of secondary school. A deposit of $20 is required with the application. This is returned if the applicant is not admitted. If the applicant is admitted, this deposit is retained by the University and is credited on the applicant's first tuition bill. *No application received after May 1 can be promised consideration.*

An applicant for admission to the freshman class is required to furnish satisfactory character references. He must also furnish his records from all preparatory schools which he has attended. Records of entrance examinations which he may have taken and of action by any other college in respect to his admission are also required. Records of scholastic aptitude tests are of value.

The completion of a four-year high school course or its equivalent, including fifteen acceptable units of credit, is normally required for admission to the freshman class. The term "unit" is understood to mean approximately one-quarter of the pupil's normal program of work for the school year.

The fifteen acceptable units of credit which are required for admission as a candidate for the degree of Bachelor of Arts must include:

Required subjects, 7 units.
    English, 3 units (4 years).
    *Mathematics, 2 units (algebra and geometry).
    †Foreign language, 2 units of a single language.

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*Applicants expecting to specialize in "science" are advised to present at least 3 units of mathematics.

†Normally required.

Restricted electives, 7 or more units chosen from:
  - Foreign language, 2, 3, or 4 units. (The college does not accept less than 2 units in any foreign language.)
  - Social sciences, 2 or 3 units (history, government, civics, economics, etc,)
  - Natural sciences, 2 or 3 units (physics, chemistry, biology, etc.)
  - Mathematics, 1 or 2 units (in addition to required units).

Free electives; not more than 3 units, at the discretion of the committee on admissions, in subjects recognized by the applicant's preparatory school in its regular program.

Quality Requirements. Applicants whose references are satisfactory and who are certified in fifteen acceptable units may be admitted without conditions. A principal may also give blanket certification without consideration of specific subjects. In doing so he accepts complete responsibilty for the student's success in college.

Applicants who present fourteen certified units and one pass unit may be admitted with *one condition* (see below); applicants who present thirteen certified units and two pass units may be admitted with *two conditions.* No applicant with less than thirteen acceptable units of certified credit or its equivalent will be accepted without examination unless his average grade places him in the highest quarter of the class with which he graduates from high school. Applicants who qualify under this provision may be admitted with two conditions.

Certificates are accepted from schools in New England on the basis of well established standards which prevail in that region.

A certificate from a school which lies outside New England will be interpreted to mean that the student is prepared to undertake college courses for which the certified subjects are prerequisite. A school will be judged in respect to continued certification privilege, on the basis of the college records of the candidates in the certified subjects.

Entrance Examinations. Applicants who cannot present the necessary number of certified units should arrange in consultation with the Dean of the college to take examinations which are given by the

College Entrance Examination Board. The college will determine in each case what constitutes a satisfactory record in such examinations.

Conditions. Conditions may be in specified subjects which were passed but with less than certificate grade, or may be general, in the latter case indicating some subject deficiency in the candidate's preparation as a whole.

Applicants who are accepted with conditions have an opportunity to free themselves from these conditions before enrolling, by satisfactory records in College Board examinations.

Conditions are removed if, at the end of the freshman year, the student has met the scholarship requirements for regular standing, namely, no failures and grades above D+ in three-fourths of the normal credit for the year.

A last chance to remove conditions is offered by College Board examinations after the end of the freshman year and before the beginning of the sophomore year.

Each condition not removed before the beginning of the sophomore year is replaced by an additional requirement for graduation amounting to one-half course.

ADMISSION WITH ADVANCED STANDING

A student who wishes to enter the college after attending another institution of college grade is required to submit a letter of honorable dismissal, a complete transcript of his record at the institution last attended, and such other information as the Committee on Admissions may request. If he is admitted he will be provisionally classified as a freshman, sophomore, junior, or senior and will be permitted to register for a program corresponding to this classification. He will not be given a final class rating until he has been in residence for at least one semester.

After a semester in residence he will be given conditional credit for the work done elsewhere to an amount determined by vote of the College Board, on the recommendation of the Recorder and the departments concerned.

A graduate of the three year course of the Worcester Art Museum School may be admitted as a candidate for the bachelor's degree with the rank of *junior* in the college. To graduate from Clark, such a student must meet all the usual admission requirements and all the normal course requirements of the college.

The bachelor's degree will not be conferred upon a student until he has spent at least a year in residence at Clark University, and usually not unless the period of residence includes the two semesters immediately preceding the granting of the degree.

THE ACCELERATED PROGRAM

Since 1942, Clark University has offered an "accelerated program" of college work which permits a student who takes advantage of the twelve-week summer term to complete the requirements for a bachelor's degree in three calendar years.

The accelerated program will be continued through the Summer of 1949 but not thereafter.

FACULTY ADVISERS

When a student is admitted to the college he is assigned to a member of the faculty who will act as his adviser. The adviser will assist the student in making up his program of studies for registration and will be ready at all times to afford him help and counsel.

FRESHMAN INDUCTION PERIOD

The freshman class of the men's college assembles for an induction period a few days before the beginning of the academic year in September. This period is usually spent at a camp in the vicinity of Worcester and is used to complete certain important preliminaries before the beginning of class work.

A fee of $5 is charged for the induction period.

REGISTRATION

Each student is required to register for a program of studies at or before the beginning of each semester. Due notice of registration periods is given. Failure to register before the end of the periods designated involves a charge of $1 for each day's delay up to a maximum of $5.

Changes in registration may be made, on forms supplied by the Recorder, within a reasonable time after the beginning of the semester.

Freshmen may register for programs of either five or six courses in the first semester. In subsequent semesters programs of six courses are restricted to students whose average grade in all courses for the preceding term has been C+ or better, except in the case of seniors. A senior whose graduation depends upon the completion of a program of six courses may register for such a program if his average grade for the preceding term has been C– or better.

The designation of a *major subject* is required as part of registration at the beginning of a student's second year in college. This election when once recorded may be changed only with the approval of the Dean. Although the *major subject* is not officially recorded until the student's second year in college, he should plan his program from the beginning with his probable choice in mind.

STUDENT PROGRAMS

The curriculum permits considerable freedom of adjustment to individual differences of interest. Each student's program of studies includes a group of courses constituting a *major,* also courses in English, in foreign language, and in fine arts or music, and other courses chosen under regulations intended to insure a reasonable distribution of work among the various departments. A large part of each program is made up of courses chosen without restriction.

For statements regarding courses which may be combined to form a *major,* the announcements of the different departments should be consulted. A number of interdepartmental majors described in the catalog on pages 84-6 are also offered.

A regular student normally carries a program of five courses throughout the academic year, September to May, in addition to required work in physical training. In general it is expected that a course meeting three times weekly will require a minimum of two hours of preparation for each lecture or recitation. Laboratory periods are usually three hours in length.

A student carrying the regular program should, therefore, expect his college work to require from forty-five to fifty hours of his time per week, in addition to the work in physical training.

Regular attendance at a weekly assembly is required of all students.

Instruction is offered in four groups of subjects.

Group A. (Science and Mathematics.) Biology, botany, chemistry, experimental psychology, geology, mathematics, physics, and physiology.

Group B. (Social Sciences.) Economics, education, geography, government, history, international relations, philosophy, psychology, and sociology.

Group C. (Language and Literature.) Greek, Latin, English, French, German, Spanish, and an interdepartmental course in language and literature.

Group D. Fine Arts.

The Freshman Program. A first-year student must make up his program entirely from courses designated as "Open to Freshmen."

A candidate for the degree of Bachelor of Arts must include the following courses in his program for the freshman year:

1. English 11.
2. A course in foreign language.
3. A course in group A.
4. A course in group B, not including Philosophy 11a, 11b.
5. An elective. (This course must be Mathematics 11 for students intending to major in group A, including pre-dental and premedical students.)

Candidates for the degree of Bachelor of Business Administration will follow the program outlined under the announcement of the Division of Business Adminstration.

Any first-year requirements which have not been completed must be included in the program of courses for the second year.

The Program for Undergraduates Other Than Freshmen. Undergraduates other than freshmen may enter any course listed under the heading "primarily for undergraduates" for which, in the judgment of the instructor in charge, they are prepared. Seniors and juniors who have completed the published prerequisites are admitted, at the discretion of the instructor in charge, to courses listed under the heading, "for advanced undergraduates and graduate students." Undergraduates are not admitted to courses primarily for graduate students except in rare cases, and then only after a special vote of the College Board and the approval of the secretary of the Graduate Board.

Regular physical exercise is required of all students, with the exception of veterans, for the general promotion of their health and mental efficiency. Physical training is scheduled at times which avoid conflict with recitation hours. *Students are usually excused from this requirement only on the recommendation of the medical director.*

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS

All college regulations involving a quantitative statement of credit are expressed in terms of courses.

A course as a unit of credit normally implies three or four class meetings or laboratory exercises per week throughout two semesters and constitutes one-fifth of a student's normal program. Where departments offer fractional courses, these will be combined in reckoning a student's total credit in courses. Students admitted to classes primarily for graduate students receive credit of one-half course per semester irrespective of the number of class meetings.

A student in good standing in the college will be recommended for the degree of Bachelor of Arts whenever he completes all of the following requirements, unless in the judgment of the College Board there is cause for withholding this recommendation:

1. *Residence.* Not less than three academic years of college study in residence. At least one full year and usually the last year before the degree is conferred must be spent at Clark University.
2. *Course requirements.* Twenty courses in addition to required physical training, except in the case of veterans who are eligible for benefits under Public Laws 16 or 346 as amended by Public Law 268. Such veterans will normally be graduated on the completion of nineteen courses, credit for the twentieth course being granted for military service and miscellaneous training in service.

A satisfactory scholarship record must be maintained throughout the entire program.

3. *Physical training.* Three years of physical training, two hours per week. Veterans who have completed the basic training for any branch of military service and those who served in the Merchant Marine are excused from the requirement in physical training.
4. *Assembly.* Attendance at a weekly assembly is required.

Requirements 3 and 4 are in addition to the course requirements as stated above.

5. A *major,* i.e. seven courses, approved by the student's major department. Four or five of these courses must be in the major department, the remaining two or three must be in subjects related to the major subject.

Of the fourteen semester grades recorded in a student's major, at least eleven must be C or better.

The following interdepartmental majors are offered:

International Relations
English History and Literature
American Civilization
  a. American Arts & Letters
  b. Problems of American Society

Information concerning the requirements in interdepartmental majors may be received from the instructor in charge of each.

Mathematics is a requirement in the freshman year for a student who intends to major in group A, including pre-dental and pre-medical students. This course may, with the approval of the major department, be included in the seven courses constituting the major.

Students majoring in Group C who have not offered at least two units of Greek or Latin for admission are required to take a year's course in either classical civilization or elementary Greek or Latin. A choice between civilization and language is subject to the approval of the major department. If the language course is elected, this requirement should normally be satisfied during the freshman year. The course satisfying this requirement may, with the approval of the major department, be included in the seven courses constituting the major.

6. *English.* (a) English 11, or its equivalent; a requirement in the freshman year for all candidates for the degree of Bachelor of Arts.

   (b) An additional half course in English literature, composition or public speaking.

   (c) Satisfactory proficiency in the use of English.
7. *Fine Arts or Music.* A half course chosen from the following list: Fine Arts 1, 10, 11, 13, 15; Music 12, 13, 14, 15; French 113; German 141; Greek 123; Latin 123.
8. *Foreign language.* (a) One course in foreign language, required in the freshman year.

   (b) One course in a foreign language at or beyond the level of third-year college courses in that language. This requirement may be met by the course required in the freshman year.
9. *Group A.* Two courses—either two courses in a single *field* of study, or one course in each of two fields. These courses may not be distributed between more than two fields of study. One of them *must* be a laboratory course.

   Courses in the history of the sciences are not counted toward the fulfillment of this requirement.
10. *Group B.* Two courses—either two courses in a single field of study, or one course in each of two fields. These courses may not be distributed between more than two fields of study.

GRADING AND SCHOLARSHIP

At the end of each term a final grade—in terms of A, excellent; B, good; C, average; D, poor; F, failure—is reported for each course. The modifying symbols plus (+) and minus (–) are used to indicate variations within each general classification. A report of incomplete is permitted only when severe sickness or some equally unavoidable circumstance prevents the completion of a course. Failures may not be made up, except by repeating the course.

Courses with grades of D+, D or D– may not be counted toward a bachelor's degree beyond one-quarter of the total credit required;

i.e., not more than five (5) such courses, or their equivalent in fractional courses, may be counted. If grades are not given in some of the twenty courses required for the degree, the maximum credit which may be counted with grades of D+, D or D– is reduced to one-quarter of the total credit from courses in which grades are given.

CLASSIFICATION OF STUDENTS

Students are classified as freshmen, sophomores, juniors, or seniors on the basis of the amount of credit toward the bachelor's degree shown by their records at the beginning of each academic year. Such classification takes into account the quality requirements stated in the preceding section. Neither length of residence nor number of courses completed will change a student's classification unless the required quality of work has been done.

A student who, at the beginning of any term, is clearly in a position to complete the requirements for the degree before the beginning of the next term is classified a *senior.*

GENERAL HONORS

First honors and *second honors* are awarded annually to members of each class who have, in the judgment of the College Board, distinguished themselves by their scholarship during the year.

The bachelor's degree is awarded *with honor, with high honor,* and *with highest honor* to members of each graduating class whose records, in the judgment of the College Board, warrant this distinction.

DEPARTMENTAL HONORS

An honors program, leading to the degree of Bachelor of Arts *with honors in a particular department,* may be undertaken by a member of the junior class if his cumulative scholarship average places him among the highest third of his class. This plan permits an able student in coöperation with his honors' adviser, to organize the work of his junior and senior years into a unified program which may include a certain number of honors courses. In these he works with a considerable measure of independence under the supervision of his honors adviser. A maximum of two honors courses may be included in the program of any candidate for departmental honors.

Application for honors work should be made in writing to the major department not later than the first day of May of the sophomore year.

Admission to candidacy for departmental honors does not relieve a student from any of the standing regulations of the college except as specifically stated above. If a student's candidacy for honors is terminated for any reason, the amount of credit, if any, to be allowed for special honors courses will be determined by the College Board in consultation with the major department.

SCHOLARSHIP SOCIETY

The Clark Scholarship Society was organized in 1914. Its object is, "to maintain a high and broad conception of scholarship; to encourage devotion to scholarship, so conceived; to promote a close relation for mutual benefit between the undergraduate members and the faculty members of the society." Membership in the society is open to members of the faculty. Student members are elected at the end of the junior year. The selection is made from students with highest standing in the junior class. Nominations are made by the College Board and the undergraduate members of the society elect from the students so nominated. Additional nominations may be made at the middle and end of the senior year.

ABSENCES

Regulations applying to absences from scheduled class meetings and laboratory exercises are based upon the conviction that such absences, regardless of their cause, involve a loss to the student and a drag upon the class. Students are, accordingly, expected to be consistently regular in attendance. Subject to this general provision, students are given a considerable degree of freedom in the control of their attendance. It is expected that such freedom will not be abused, and that it will contribute to the growth of each student's sense of responsibilty.

Detailed regulations in harmony with the foregoing principles are posted on the official bulletin board for the guidance of students. They are also published in the Students' Handbook, issued annually. Students are expected to familiarize themselves with these regulations.

Special regulations apply to attendance at the weekly assemblies and physical training.

EXTRA-CURRICULAR ACTIVITIES AND STUDENT LIFE

Student life at Clark is, as would be expected at a small institution, friendly and informal. Fixed rules and regulations are few, the assumption being that students will conform to the recognized standards of morality, good order, and gentlemanly conduct. College activities are, however, under sufficient faculty oversight to insure responsibilty in business dealings and consideration of the welfare of the individual student and of the college community.

The Activities Fee. Athletics and several non-athletic activities are partially supported by an activities fee. This fee admits a student, without additional charge, to all athletic contests held on the college grounds, provides him with the college newspaper, and admits him to plays and concerts presented by the dramatic and musical clubs.

Activites. Students in Clark College have the opportunity to participate in intercollegiate soccer, baseball, tennis, basketball and crew. A competent coach has immediate supervision over the athletic teams. General supervision of the athletics program is vested in the Athletics Board, consisting of the Director of Physical Education, the faculty Committee on Athletics, and the Athletic Council. The Committee on Athletics has authority to revise or to veto decisions of the Athletics Board.

In addition to intercollegiate athletics, a steadily increasing intramural program gives opportunity for widespread participation in games and contests of various sorts.

Opportunities for recreation, outside of athletics, are found in dramatic clubs and musical clubs, under expert direction; in editing and publishing the college newspaper (*The Scarlet*) and the senior yearbook (*The Pasticcio*); also in such organizations as the Debating Club and International Relations Club. Gryphon, the senior honorary society, plays an important part in campus life. Non-athletic activities are under the supervision of faculty advisers.

Formal proms, informal Bohemes and fraternity activities furnish further opportunities for social life. For many students, the most prized opportunity for social contacts is in the offices and laboratories, where members of the faculty may be visited with ease and freedom.

Eligibility for Competitive Activities. Participation in organized extra-curricular competitive activities is denied only when a student's scholastic record indicates that continuance in an activity might be responsible for scholastic failure. A student is eligible if he is enrolled in a regular program of five courses and if at the end of any half term he has (a) passed in all courses and been graded at least C– in one of them, or (b) passed in all but one course and been graded at least C– in two of them.

Any student carrying less than a full program of studies is ineligible unless his reduced program permits graduation at the end of the year in which that program is carried.

Ineligibility becomes effective the eleventh day after the beginning of a half semester and continues through the tenth day of the succeeding half semester.

Students admitted with advanced standing from another college are ineligible during the first half semester of residence at Clark College.

A special student is normally not entitled to participate in competitive activities of the college. The College Board may, however, permit such participation in the case of a special student who is enrolled for a full program (five courses).

Eligibility for Non-competitive Activities. All students may participate so long as their scholarship proves satisfactory. Details are published in the Students' Handbook.

The Women's College of Clark University

ADVISORY BOARD FOR THE WOMEN'S COLLEGE

Mrs. Robert K. Shaw, *Chairman*
Mrs. Robert W. Stoddard, *Vice Chairman*
Miss Ruth Tomlinson, *Secretary*
Mrs. Harold D. Woodbury
Mrs. Myron F. Converse
Mrs. Clarence S. Arms
Mrs. Reginald Washburn
Mrs. Thomas F. Power
Mrs. Aldus C. Higgins
Mrs. Philip M. Morgan
Miss Mary N. Allen
Mrs. John D. Peabody
Miss M. Hazel Hughes

FOR THE ALUMNAE

Miss Katheryn Feeley
Miss Florence McKeon
Miss Elizabeth A. Rourke
Mrs. Richard J. Hayes

FOR THE FACULTY WOMEN'S CLUB

Mrs. Percy M. Roope
Mrs. John E. Bell
Mrs. Carey E. Melville
Mrs. Vernon Jones

The Women's College of Clark University was established in the fall of 1942 for the benefit of young women who wish to attend college in Worcester.

All courses of instruction available for men are open to women. The requirements for admission and for a bachelor of arts degree are identical with those for men, and the same tuition and fees are charged. (See earlier section of this catalogue, where requirements and fees are dealt with in detail.)

Undergraduate women who do not commute from their own homes are expected to live in one of the women's dormitories. If other arrangements are desired, written request from a parent or guardian must be sent to the Dean's office and the Dean's approval must be obtained.

Suitable provision has been made for the comfort and convenience of women students while on the campus. A large room on the first floor of Jonas G. Clark Hall, attractively decorated and comfortably furnished, is used by the women as a lounge and as a center for their activities. They also have gymnasium and luncheon room facilities.

The general supervision of the activities of women students is in the hands of Miss M. Hazel Hughes, director of student activities. The Women's College has an Advisory Board composed of representative Worcester women as well as representatives from the Alumnae and Faculty Women's Club who are interested in the educational program, and who advise the administration on matters of general policy and social affairs.

ATHLETICS

Women students use their own gymnasium for practice but have the use of the university gymnasium for games with outside organizations. All students are given a physical examination at the beginning of each year by the medical director for women who lives in the neighborhood and is readily available for resident students.

Several types of athletics are open to women. In the fall and spring hockey, crew, archery and tennis are conducted outdoors. Tournaments are held in all sports in the spring and fall and a cup is awarded to the winner of each event. During the winter months although basketball is the principal organized athletic activity, volley ball and badminton are also offered.

There is a physical education program, designed to improve posture and general health. Attendance at classes in physical education is required twice a week for the first two years. Training in a group sport and an individual sport is required during the junior year. Swimming and life saving courses are available through arrangements with the Young Women's Christian Association. These courses are conducted by a member of the Physical Education Staff of the University.

Students receive free tickets to all athletic events.

STUDENT ACTIVITIES

The Women's College has its own student government and class officers who direct student activities. A social committee plans parties and group meetings.

Women students have many of their own organizations but also may join many of the organizations of the men's college. They serve on *The Scarlet*—the college newspaper, *The Pasticcio*—the college yearbook, and are eligible for membership in the debating society and glee club. The women students participate in the dramatic productions, both in acting and in assisting with stage settings and costumes. The girls are represented on the "Boheme Committee" which plans the college dances and on the Student Activity Fund Committee.

INDUCTION PERIOD

The freshman class of the women's college and all women transfer students assemble at the college on Wednesday before the opening of the academic year to become acquainted and to complete various important preliminaries before the beginning of class work. If conditions warrant, the induction period is spent at some suitable place in the country, not too far from Worcester.

A fee of $5.00 is charged for the induction period.

ADMISSION AND SCHOLARSHIPS

As stated above, requirements for admission are outlined in detail in an earlier section of this catalogue. In addition to admission to the freshman class, admission to the upper classes by transfer from other colleges is possible.

For scholarship aid to women the Trustees each year make a special grant, varying in amount with the established need.

The Clark University Women's Club and the Clark University Alumnae Association each offer two scholarships. The Swedish National Federation has a scholarship awarded annually to a deserving student of Scandinavian stock from Worcester or vicinity. The Soroptimsts Club of Worcester has provided a scholarship for a woman student. Other special awards have been made possible by friends of the college.

Correspondence regarding admission and requests for application blanks should be addressed to:

DEAN OF THE COLLEGE, CLARK UNIVERSITY, 950 MAIN ST.,
WORCESTER (3), MASS.

The Division of Business Administration

ORGANIZATION

Arthur F. Lucas, *Director of the Division*

ADMINISTRATIVE COMMITTEE

President Howard B. Jefferson, *ex officio*

Arthur F. Lucas, *Chairman*	George E. Hargest
John E. Bell	Homer P. Little
Samuel J. Brandenburg	Raymond E. Murphy

The Division of Business Administration is an integral part of the undergraduate college of Clark University. Its administration is in the hands of the Administrative Committee.

The program in Business Administration is given coöperatively by the Departments of Economics and Sociology, English, Geography, History and International Relations, Mathematics and Psychology.

In 1948-49 the following members of the faculty gave courses in the program: Mr. Bowman, Mr. Brandenburg, Mr. Breen, Mr. Cohen, Mr. Gilson, Mr. Hargest, Mr. Illingworth, Mr. Letendre, Mr. Lucas, Mr. Maxwell, Mr. Moore, Mr. Murphy, Mr. Patton, Mr. Schaffer and Mr. Zukowski.

THE PROGRAM IN BUSINESS ADMINISTRATION

The Division of Business Administration offers a four-year program of studies designed to prepare young men and women for careers in business. Students electing this program will normally become candidates for the degree of Bachelor of Business Administration and must meet the specific requirements for this degree. Students in the Business Administration program are entitled to all privileges of the University which are open to undergraduates, including the right to elect undergraduate courses in other fields such as social studies, language, fine arts and science.

The business program is designed to provide an opportunity for the student to become acquainted with the basic characteristics of modern industry and commerce, to acquire an understanding of the general principles of business and to receive training in the techniques common to all successful business enterprises. It should assist the student in adapting himself to general business requirements and in relating his specific job to the entirety of business and industrial enterprise as well as in perfecting his skill in particular techniques.

The program consists of carefully selected courses in arts and sciences together with specialized courses of particular interest to students of business. Among the former are basic courses in English composition, mathematics, economics, psychology, and American history and government. Among the latter are courses in accounting, finance, managerial techniques, statistical methods, merchandising, and business law. Training in the analysis of administrative problems is emphasized throughout the program.

A PROGRAM FOR CANDIDATES FOR THE DEGREE OF BACHELOR OF ARTS WITH EMPHASIS ON BUSINESS ADMINISTRATION

In addition to the program leading to the degree of Bachelor of Busines Administration, the College offers a less intensive program in Business Administration for candidates for the degree of Bachelor of Arts. Students taking this program should major in the Department of Economics and Sociology. They must meet all the requirements for the degree of Bachelor of Arts including those in English, fine arts, foreign languages and sciences. First year students should take the normal college program for freshmen and should elect Economics 12 for the Group B requirement. The program for the second year should include Business Administration 117 and Economics 11. In the third and fourth years students should elect at least two basic courses in economics, such as Economics 13, 21, 22 or 26, and at least four courses in business administration. The following are recommended: Business Administration 16, 18, 124, 20, and 127,

Students should note that the following courses may not be counted for credit toward the degree of Bachelor of Arts: Business Administration 11a, 13, 14b, 17, 128, 181a, 182b, 23a, 23b, 227, 237.

ADMISSION

Applicants for admission to the freshman class in the Business Administration program are accepted on the same basis as other applicants for admission to the college except that the secondary school units presented for admission may be distributed as follows:

Required subjects	8 units	*Elective subjects*	7 units
English	3 units	(of which as many as 3 units may be in commercial subjects)	
Mathematics (algebra)	1 unit		
Foreign Language (one language)	2 units	Total	15 units
Social studies	2 units		

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF BUSINESS ADMINISTRATION

The Freshman Program

A uniform program is normally required of all freshmen. It includes the following courses:

First Semester		*Second Semester*	
Eng. 11a	Composition	B.A. 14b	Business English
Econ. 12	Industrial and Commercial History	Econ. 12	Industrial and Commercial History
B.A. 117	Principles of Accounting	B.A. 117	Principles of Accounting
B.A. 11a	Fundamentals of Business	B.A. 13b	Business Mathematics
B.A. 13a	Business Mathematics		An elective
	Physical Training		Physical Training

Note: Qualified students are excused from B.A. 13a. These students take an elective.

Additional Course Requirements

Additional courses required of all candidates for the degree of Bachelor of Business Administration are:

B.A. 16	Business Statistics
B.A. 17a	Public Speaking
B.A. 18	Business Organization and Finance
B.A. 20	Business Law
Econ. 11	Principles of Economics
Econ. 13	Money and Banking*
Govt. 15	Introduction to Government or Hist. 10, Europe and the U. S. since 1500

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*Under special conditions Economics 13 may be replaced by certain other courses in economics.

Areas of Concentration

At the end of the sophomore year, each candidate for the degree of Bachelor of Business Administration must submit to his faculty adviser an integrated program of studies covering the junior and senior years. A proposed program should indicate the student's areas of special interest and the specific courses he intends to elect. Ordinarily no program will be approved that does not include in addition to the required courses named above, at least five courses in Busines Administration or closely related subjects. Typical of these integrated programs are the following:

- *Accounting*
  - Intermediate Accounting
  - Cost Accounting
  - Auditing
  - Advanced Accounting
  - Industrial Management
  - Office Management
- *Foreign Trade*
  - Marketing
  - Foreign Trade
  - Economic Geography
  - Industrial Psychology
  - A foreign language
- *Management*
  - Intermediate Accounting
  - Cost Accounting
  - Marketing
  - Industrial Management
  - Office Management
  - Industrial Psychology
- *Merchandising*
  - Marketing
  - Selling
  - Advertising
  - Foreign Trade
  - Office Management
  - Industrial Psychology
- *Personnel Management*
  - Industrial Psychology
  - Tests and Measurements
  - Personnel Management
  - Industrial Management
  - Office Management
  - Labor Problems
- *Statistics*
  - Business Statistics
  - Mathematics of Statistics
  - Business Cycles
  - Cost Accounting
  - Industrial Management
  - Office Management

GENERAL UNIVERSITY REQUIREMENTS

Candidates for the degree of Bachelor of Business Administration are subject to the same general University and College regulations as apply to candidates for the degree of Bachelor of Arts except as these are modified by the special requirements of the business program.

COURSES IN BUSINESS ADMINISTRATION

Courses in Business Administration will be found listed with descriptions under "Business Administration" in the list of Departments and Courses of Instruction.

PROGRAMS AND COURSES OF INSTRUCTION

BIOLOGY
BUSINESS ADMINISTRATION
CHEMISTRY
CLASSICS
ECONOMICS AND SOCIOLOGY
EDUCATION
ENGLISH
FINE ARTS
FRENCH
GEOGRAPHY
GEOLOGY
GERMAN
HEALTH EDUCATION FOR UNDERGRADUATE WOMEN
HISTORY AND INTERNATIONAL RELATIONS
MATHEMATICS
PHILOSOPHY
PHYSICS
PSYCHOLOGY AND EDUCATION
ROMANCE LANGUAGES
SPANISH

Programs and Courses of Instruction

Departments, and in some cases important subdivisions of departments, are listed alphabetically in the following pages.

Departmental announcements precede the lists of courses which are offered by the departments. These announcements contain important general information, as well as departmental regulations concerning graduate work and statements of the requirements for undergraduate majors.

Courses are, in general, arranged in sequence under each heading so as to progress from the more elementary to the more advanced. Each course is described as it has been given during the current academic year unless an accompanying note states otherwise. Notice is given in all cases where a department plans to alter the content of the course, or to omit it. If a course is not currently given but will be offered at a later date this fact is stated.

The unit of instruction for undergraduates is a "course." A course normally meets for classroom or laboratory exercises three or four times weekly throughout the regular academic year (September to May) and constitutes one-fifth of the normal program for an undergraduate.

Each unit of undergraduate instruction as listed below yields credit for one half-course in each semester unless its value as a fractional course or a multiple course is indicated.

Advanced courses, not primarily for undergraduates, are announced with a statement of the number of weekly meetings.

Fractional credit is given for the satisfactory completion of one semester of work in any course unless the course is designated as indivisible. Courses primarily for graduate students yield full half course or full course undergraduate credit irrespective of the number of class meetings.

With the consent of the instructor, a course may be entered at the beginning of either semester.

Courses are classified under three headings as follows:

1. PRIMARILY FOR UNDERGRADUATES, designed by numbers beginning with the figure (1).

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS, designated by numbers beginning with the figure (2).

3. PRIMARILY FOR GRADUATE STUDENTS, designated by numbers beginning with the figure (3).

Interdepartmental Majors

In order to provide opportunities for study in certain fields intrinsically worthwhile culturally or professionally, which afford a somewhat greater breadth of choice than strictly departmental programs, yet possess unity in content and purpose, the faculty has authorized certain interdepartmental majors. It will be noted that eight or more courses may be required for such a major.

I. INTERNATIONAL RELATIONS

Freshman and Sophomore Years

History 10—Survey of the History of Europe and the U. S. since 1500
Economics 11—Principles of Economics
Geography 10—Principles of Geography

Junior and Senior Years

Government 24—International Relations
Government 241—International Law and Organization
Geography 201—Political Geography
Economics 207—International Economics } two courses
Economics 205—Economic Theory } two courses
Economics 26—Government and Industry } two courses
Senior Seminar—to be organized by the departments of History, Economics, and Geography
Instructor in charge: Professor Hayden

II. ENGLISH HISTORY AND LITERATURE

Freshman Year

History 10—Survey of the History of Europe and the United States since 1500.

Sophomore Year

History 12—History of England
English 15—Survey of English Literature, from the beginning to 1832.

Junior and Senior Years

History 221—England Since 1760
English 15—Survey of English Literature, from 1832 to the present (first semester)
Philosophy 12—History of Philosophy.

English 10b—Chaucer
English 13b—Shakespeare (or English 147b—Oral Interpretation of Shakespeare)
English 14b—Elizabethan Drama
English 104a—Seventeenth Century with special emphasis on Milton
English 105b—English Literature of the Eighteenth Century
English 113a—British Drama
English 117a—English Romantic Poetry
English 126a—Modern Drama
English 142a—The English Novel
} six half-courses

Instructor in charge: Professor Anderson

III. AMERICAN CIVILIZATION

Freshman Year

History 10—Survey of the History of Europe and the United States since 1500

Sophomore Year

Government 15—Introduction to Government
Economics 11—Principles of Economics
Sociology 11—Principles of Sociology

Junior and Senior Years

History 230—Social and Intellectual History of the United States
English 111—Survey of American Literature
Sociology 12a—Cultural Anthropology
Philosophy 12—History of Philosophy
History 232—American Constitutional History
History 234—American Diplomatic History
History 235—The U. S. in the Twentieth Century
Government 25b—American Political Parties
Sociology 22b—Race and Nationality
Sociology 2—Social Institutions
Economics 22—Labor Problems
Economics 26—Government and Industry
Economics 15a—Public Finance
Economics 25b—Problems in Public Finance
Economics 21b—Business Cycles
Economics 205—Economic Theory

Two and one-half courses

Instructor in charge: Professor Campbell

LANGUAGE AND LITERATURE

The course described below is designed to serve the interests of the general student, rather than the interests of the student whose concentration is in literature or in one of the languages. The literary works chosen for investigation are studied with a view of developing an area of knowledge and experience which educated men and women have in common with the eminent creative artists of our Western civilization, and with a view of understanding basic human problems and humane attitudes that are both constructive and creative.

LL13. Literature and the Nature of Man.

Offered by the four departments of Classics, English, German, and Romance Languages as a one semester course in the scholastic year 1948-49, but as a full course in the future. The works to be studied are the *Antigone* of Sophocles, Shakespeare's *Hamlet,* Goethe's *Faust,* Moliere's *Misanthrope,* and Ibsen's *Rosmersholm.*

Foreign works are read in translation. Emphasis is placed on informal discussions. The course is, therefore, conducted in two sections of not more than fifteen students each. Visiting lecturers will participate.

This course will satisfy the requirement for an English course beyond the freshman level, but not the Fine Arts requirement.

Sections: M.W.F. 12; and W.F. 2-3:30.

MESSRS. ANDERSON, BARLOW, BOSSHARD, KING, MARBLE.

DEPARTMENT OF BIOLOGY

PROFESSOR POTTER, ASSOCIATE PROFESSOR NUNNEMACHER
ASSISTANT PROFESSOR BLAIR

The biological laboratories are well equipped for the courses offered and contain special equipment for advanced investigations. Funds are available annually for the purchase and building of apparatus which may be required. The university library contains complete files of the more important periodicals and reference works. The department maintains an herbarium of over 40,000 sheets. Certain assistantships, fellowships and scholarships are available from time to time.

UNDERGRADUATE WORK

Biology 11 presents a comprehensive view which is prerequisite to all other courses in the department, except Biology 19a.

An undergraduate majoring in biology must complete Biology 11 and three advanced courses in biology, Chemistry 11, Physics 11, Mathematics 10 or 11, and at least one additional course in chemistry, physics or geology.

A candidate for honors in biology must also take Biology 11, 12, 14 and 240.

Courses in related fields include all courses in Group A, Psychology 203 and Geography 12.

THE PRE-MEDICAL PROGRAM

Clark University is justly proud of its pre-medical training program. Not only do our better students have little difficulty in entering the best medical schools, but they usually rank in the upper half of their medical school classes and become respected and outstanding physicians.

The student entering upon the pre-medical program must be prepared to compete with other college students of above-average ability; he must be of good health and capable of sustained hard work; he must like and get along well with all kinds of people and he must have a real desire to help the sick and advance the science of medicine. The pre-medical student must be prepared to undertake a program of intensive study which usually takes eight years before the medical degree can be obtained. During this time the large amount of class and laboratory work reduces considerably the opportunities for earning money through outside work.

While the requirements for the Bachelor of Arts degree assure each graduate familiarity with several fields of learning, the pre-medical student should take as many non-science courses as possible to round out his general education, because medical school programs leave no time for courses outside of their technical field. Courses in psychology and human relations will be of particular benefit.

The field of medicine is open equally to men and women.

The following programs are recommended for pre-medical students with a major in biology. Program A places the emphasis on biology; Program B places the emphasis on chemistry.

Program A	Program B
First year	First year
English	English
Foreign Language	Foreign Language
Mathematics	Mathematics
General Biology	General Chemistry
Group B (one course)	Group B (one course)

Second year
  Biology 12
  General Chemistry
  Foreign Language
  Group B (one course)
  ⅓ course in English and ½ course Fine Arts

Third year
  Biology 16, 17, 18 (Any two)
  Chemistry 12a and 14b
  Physics 11
  Two electives

Fourth year
  Biology (Physiology)
  Chemistry 15
  Three electives

Second year
  Chemistry 12a and 14b
  General Biology
  Foreign Language
  Mathematics 12
  ½ course in English and ½ course Fine Arts

Third year
  Chemistry 15
  Biology 12
  Physics 11
  Group B (one course)
  ½ course (elective)

Fourth year
  Chemistry 19
  Biology (advanced)
  Three electives

GRADUATE WORK

Students whose records are approved by the department may be admitted by the Graduate Board for work leading to the degree of Master of Arts.

COURSES IN BIOLOGY

During the academic year 1948-1949 the following courses were given: 11, 12, 13, 14, 18a, 19a, 220a, 224b, 240, 242, 260, 261b, 300, 320, 340, 350 and 360.

1. PRIMARILY FOR UNDERGRADUATES

11. General Biology. An introduction to the fundamental principles and problems of biology.

Divisible course upon approval by the department.

Open to freshmen.

Through the year. M. W. F. 9; M., 2.

Mr. Potter and Mr. Nunnemacher

12. Comparative Anatomy. A study of the morphology of the vertebrates from a comparative standpoint which traces the evolution of animals from fish to mammals.

Lectures and laboratory work.

Through the year. W. F., 10; Tu. F., 2. Mr. Nunnemacher

13. SEMINAR IN GENERAL BIOLOGY. Credit is not given for this course. All students in the department are invited to attend and to participate. STAFF OF THE DEPARTMENT

14. BOTANY. First semester, morphology and taxonomy of the lower plants. Special emphasis is given to the algae and fungi.

Second semester, systematic botany of the higher plants with special emphasis on our local flora. A collection of one hundred plants is required, also a spring field trip of at least three days' duration.

Either semester of the course may be elected separately.

Prerequisite: Biology 11, first semester.

Through the year. M.W.F., 1; Th., 2. MR. POTTER

15. INVERTEBRATE ZOOLOGY.

Omitted, 1948-49.

18a. GENETICS. An introduction to the principles of genetics.

Half course. First semester. M.W.F., 11. MR. POTTER

19a. HUMAN ANATOMY AND PHYSIOLOGY. An introductory semester course. Does not require Biology 11 as a prerequisite but requires Biology 11 to be counted towards the Group A requirement. May not be counted toward the fulfillment of the requirement for a major in Biology. Three lectures per week.

Half course. First semester. M.W.F., 8. MR. NUNNEMACHER

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

201. ADVANCED SYSTEMATIC BOTANY. Through the year. Three laboratory periods and one lecture per week. Either semester may be taken separately. MR. POTTER

Omitted, 1948-49.

202. ECONOMIC BOTANY.

Omitted, 1948-49. MR. POTTER

204b. BACTERIOLOGY. An introduction to the study of bacteriology.

Half course. Second semester. M.W.F., 11. Laboratory period arranged. MR. POTTER

205. ADVANCED GENETICS.
Three lectures per week.
Half course. Second semester. MR. POTTER
Omitted, 1948-49.

219. ENTOMOLOGY. Fundamentals of insect life.
Three lectures and one laboratory period per week.
Half course. Second semester. MR. POTTER
Omitted, 1948-49.

220a. HISTOLOGY. A comprehensive course dealing with tissue structure. Emphasis is placed on the study of mammalian tissues. Two lectures and two laboratory periods per week.
Half course. First semester. MR. NUNNEMACHER

221b. EMBRYOLOGY. A consideration of the fundamentals of embryology. Two lectures and two laboratory periods per week.
Half course. MR. NUNNEMACHER
Omitted, 1948-49.

223b. PARASITOLOGY. An introduction to the parasitic mode of life of the protozoa, helminthes, and arthropoda and their relation to mankind. MR. POTTER AND MR. NUNNEMACHER
Half course. Second semester.
Omitted, 1948-49.

224b. NEURO-ANATOMY.
Three lectures per week.
Half Course. Second semester. MR. NUNNEMACHER

240. GENERAL PHYSIOLOGY. Open to students who satisfy their instructor as to their preparation. The principal types of functioning characteristic of living organisms are considered in the light of their physiochemical determinants.

Through the year. Tu. Th., 11; and two laboratory periods per week. MR. BLAIR

241. ENDOCRINOLOGY. A study of the ductless glands and their relation to behavior.
Half course. Second semester.
Omitted, 1948-49.

242. Advanced Physiology. Given through the year. Three lectures per week first semester and three laboratory periods per week second semester. Mr. Blair
Through the year.

260. Special Problems. Advanced semi-independent study of an approved topic under the direction of a member of the staff.
Hours and credit to be arranged. Staff of the Department

261b. Microtechnique. During the first semester emphasis is placed on the preparation of animal tissues for microscopic study. The second semester is concerned with the preparation of botanical sections.
Half course. Second semester only, 1948-49. Mr. Potter

3. PRIMARY FOR GRADUATE STUDENTS

300. Readings and Research in Botany.
Credit to be arranged. Mr. Potter

320. Readings and Research in Zoology.
Credit to be arranged. Mr. Nunnemacher

340. Readings and Research in Physiology.
Credit to be arranged. Mr. Blair

350. Advanced Studies in Biology.
Tues. 4-6. Staff of the Department

360. Thesis.
Credit to be arranged. Staff of the Department

COURSES IN BUSINESS ADMINISTRATION

A description of the program in Business Administration and a statement of the requirements for the degree of Bachelor of Business Administration will be found under the general heading "Undergraduate Section" and the special heading "The Division of Business Administration."

The courses in Business Administration and related subjects which follow are grouped under the headings: Accounting, Economics, English, Geography, History, Law, Management, Mathematics, Merchandising and Statistics.

Because of the number of these subdivisions the headings,

1. Primarily for undergraduates
2. For advanced undergraduates and graduate students have been omitted.

Reference to the following synopsis will facilitate the location of particular courses when their numerical designations are given.

COURSES IN BUSINESS ADMINISTRATION

Number	*Title*	*Heading Under Which the Course Is Listed*
11	Fundamentals of Business	Management
13	Business Mathematics	Mathematics
14	Business English	English and Public Speaking
16	Business Statistics	Statistics
17	Public Speaking	English and Public Speaking
18	Business Organization and Finance	Management
112	Introduction to Personnel Management	Management
117	Principles of Accounting	Accounting
124	Principles of Marketing	Merchandising
127	Intermediate Accounting	Accounting
128	Cost Accounting	Accounting
181	Industrial Management	Management
182	Office Management	Management
20	Business Law	Law
23	Advertising and Salesmanship	Merchandising
27	International Trade and Finance	Merchandising
227	Auditing	Accounting
237	Advanced Accounting	Accounting

In 1948-49 the following courses were given: 11, 13, 14, 16, 17, 18, 112, 117, 124, 127, 128, 181, 20, 23, 237.

ACCOUNTING

Business Administration 117. Principles of Accounting. The organization and use of financial records, with emphasis on their interpretation as well as on the techniques of procedure.

Indivisible course.

Required of freshmen in the Business Administration program.

Through the year. Tu. Th., 8; Tu., 2 and Tu. Th., 9; Th., 2.
Mr. Hargest and Mr. Zukowski

Business Administration 127. Intermediate Accounting. A study of the difficulties encountered in actual accounting practice, and the theoretical considerations that govern in distinguishing sound from unsound policies in the determination of valuations, reserves, classification of profit-and-loss items, and allocation between accounting periods, etc.

This course may be entered at beginning of the second semester, but credit will not be given until both semesters have been completed.

Indivisible course.

Through the year. Tu. Th. S., 11. Mr. Hargest

Business Administration 128. Cost Accounting. A study of cost-finding systems, with special reference to basic principles in accounting for materials, labor and burden. Emphasis is placed upon the use of forms and special books and the preparation of appropriate statements.

Indivisible course.

Through the year. Tu. Th. S., 8. Mr. Hargest

Business Administration 227a. Auditing. After a careful analysis of the purpose and scope of the several classes of audits, the course deals with (1) methods of handling engagements, (2) audit procedure, (3) detection of errors and fraud, (4) study, analysis and preparation of certificates and reports.

Half course. First Semester. Omitted 1948-49. Mr. Hargest

Business Administration 237. Advanced Accounting. The theory and practice of accounting for branches, mergers, receiverships, estates and trusts, consolidated statements, budgets, municipal accounts and other topics of an advanced nature.

Through the year. Tu. Th. S., 10. Mr. Hargest

ECONOMICS

(See also announcement of the Department of Economics and Sociology.)

ECONOMICS 11. PRINCIPLES OF ECONOMICS. Required for the degree of Bachelor of Business Administration.

ECONOMICS 12. INDUSTRIAL AND COMMERCIAL HISTORY. Required of freshmen in the Business Administration program.

ECONOMICS 13. MONEY AND BANKING. Required for the degree of Bachelor of Business Administration.

ECONOMICS 15. PUBLIC FINANCE.

ECONOMICS 21. BUSINESS CYCLES.

ECONOMICS 22. LABOR PROBLEMS.

ECONOMICS 25. PROBLEMS IN PUBLIC FINANCE.

ECONOMICS 26. GOVERNMENT AND INDUSTRY.

ECONOMICS 206b. ECONOMICS OF INDUSTRY.

ENGLISH AND PUBLIC SPEAKING

ENGLISH 11. COMPOSITION AND LITERATURE. The first semester is required of freshmen in the Business Administration program.

BUSINESS ADMINISTRATION 14b. BUSINESS ENGLISH. A course in English composition designed to train the student in the preparation of reports, letters, etc., used in business.

Required of freshmen in the Business Administration program.
Half course. Second semester. M. W. F., 10; M. W. F., 11.
MR. LETENDRE AND MR. MOORE

BUSINESS ADMINISTRATION 17a. PUBLIC SPEAKING. A course in the fundamentals of public speaking including the more common speech situations such as speech of introduction, address of welcome, expository and impromptu speeches; problems in human relations; voice tests, vocabulary drill.

Required for the degree of Bachelor of Business Administration.
Half course. First Semester. M. W. F., 11. MR. ILLINGWORTH

Business Administration 17b. Public Speaking. Parliamentary procedure, open forum, panel discussion, committee meetings, reports, extemporaneous speaking.

Prerequisite: Business Administration 17a.

Half course. Second semester. M. W. F., 11. Mr. Illingworth.

GEOGRAPHY

Geography 10. Principles of Geography.

Geography 16. Economic Geography.

HISTORY AND GOVERNMENT

Government 15. Introduction to Government.

History 10. Europe and the United States Since 1500.

One of the above courses is required for the degree of Bachelor of Business Administration.

LAW

Business Administration 20. Business Law. A study of the legal basis of business and the principles of statutory and common law as they affect business relationships; covering such subjects as contracts, property, sales, negotiable instruments and agency.

Indivisible course.

Required for the degree of Bachelor of Business Administration.

Through the year. M. W. F., 8. Mr. Breen

MANAGEMENT

Business Administration 11a. Fundamentals of Business. An orientation course designed to acquaint the student with the general characteristics and problems of American business; field trips to significant business concerns are arranged when feasible.

Required of freshmen in the Business Administration program.

Half course. First semester. Tu. Th. S., 8 and 9. Mr. Bowman

Business Administration 18. Business Organization and Finance. A unified year course in the financial structure of modern industry with emphasis on the nature of the business corporation, its financial practices, types of securities, capital structure, financial reorganization, and the problems of internal financial control.

Indivisible course.

Required for the degree of Bachelor of Business Administration.

Through the year. M. W. F., 9. Mr. Lucas

Business Administration 112. Introduction to Personnel Management. A survey of policies and practices in selection, training, promotion and transfer, wage payment, grievances of employees in industry and group relations in recreation, welfare plans, morale and collective bargaining.

Through the year. M. W., 2-3:15. Mr. Gilson

Business Administration 181b. Industrial Management. A study of the techniques of executive control and the measures of managerial efficiency pertaining particularly to production control, standardization of operations, purchasing, inventories, selling and budgeting.

Half course. Second semester. Mr. Gilson

Business Administration 182b. Office Management. A survey of the principles of office procedure and management with special emphasis upon office organization and planning, departmental organization, standardization of equipment and methods, office forms, office costs and budget, and correspondence.

Half course. Second semester. Mr. Hargest

Omitted, 1948-49.

MATHEMATICS

Business Administration 13. Business Mathematics. An elementary course designed to give the necessary foundation for an understanding of the basic mathematical processes involved in business transactions.

The second semester is required of freshmen in the Business Administration program. Qualified students will be excused from the first semester.

Through the year. Tu. Th. S., 10 and Tu. Th. S., 11.

MR. PATTON

MATHEMATICS 11. FRESHMAN MATHEMATICS.

MERCHANDISING

BUSINESS ADMINISTRATION 124. PRINCIPLES OF MARKETING. An introductory survey of the economics of marketing including the mechanics of distribution, the characteristics of the marketing system, principles of merchandising; and the chief problems of marketing.

Indivisible course. Through the year. Tu. Th. S., 10.

MR. BOWMAN

BUSINESS ADMINISTRATION 23a. ADVERTISING. An analysis of the role of advertising in modern business and a study of advertising procedures with emphasis on the economic functions of advertising, market research, campaign planning, advertising media, preparation of copy, visualization, and layouts.

Half course. First semester. Tu. Th. S., 11. MR. BOWMAN

BUSINESS ADMINISTRATION 23b. SALESMANSHIP. A study of the basic principles of selling and of their application to problems of merchandising; the history of salesmanship, classification of the market, consumer motivation, and the techniques of selling.

Half course. Second semester. Tu. Th. S., 11. MR. BOWMAN

BUSINESS ADMINISTRATION 27a. INTERNATIONAL TRADE AND FINANCE. A study of the nature, theoretical basis, methods of financing and government control of the international movement of goods.

Half course. First semester. Omitted, 1948-49.

PSYCHOLOGY

PSYCHOLOGY 11. GENERAL PSYCHOLOGY.

PSYCHOLOGY 190a. INDUSTRIAL PSYCHOLOGY.

PSYCHOLOGY 214. TESTS AND MEASUREMENTS APPLIED TO PSYCHOLOGICAL AND EDUCATIONAL PROBLEMS.

STATISTICS

Business Administration 16. Business Statistics. An introduction to statistical methods designed to acquaint the student with the elementary methods of statistics as applied to business and economic problems. Consideration is given to collection of statistical data; sources of data; presentation of facts by means of tables and graphic charts; the frequency distribution; measures of central tendency, dispersion and skewness; fitting the normal curve and goodness of fit; testing statistical results based upon samples-reliability; analysis of time series involving measurement of secular trend, seasonal and cyclical movements; construction of index numbers; correlation and the standard error of estimate; correlation of time series.

Required for the degree of Bachelor of Business Administration.

Indivisible course.

Through the year. M. W., 12; F., 12:30-2:30. Mr. Patton

DEPARTMENT OF CHEMISTRY

Professor Bullock, Associate Professor Martell, Associate Professor MacGillavry, Mr. Martin

Courses in chemistry fall into two groups:

First, those primarily for undergraduates. These furnish a foundation for professional work in chemistry or medicine, and are suitable for students desiring some knowledge of the subject as part of their general education.

Second, those primarily for graduate students.

UNDERGRADUATE WORK

Students who intend to become professional chemists or to study for an advanced degree in chemistry should major in chemistry and take an least two years' work in physics.

They are advised to conform as closely as possible to the schedule given below.

First year: Chemistry 11; Mathematics 11; English 11; one course in "group B" and foreign language.

Second year: Chemistry 13, 14b; Physics 11; Mathematics 12 and a continuation of work in foreign language.

Third year: Chemistry 15, 16a and 19; and electives.

Fourth year: Five courses, chosen from the following: Chemistry 112b, 116, 212b, 214b, 215; Physics 15 and 17; an elective. A choice, with reference to future work, should be made after consultation with the chemistry staff.

Chemistry 19, required of all chemistry majors, is essential for work in physiology. Two years of mathematics are required preparation for Chemistry 19 and for graduate work in chemistry. The same amount of mathematics is required for all who elect chemistry as a "major," and for all who expect to become professional chemists.

For professional work in chemistry, at least one year of graduate study is highly desirable.

Students who intend to enter the field of secondary education should acquaint themselves with the requirements in "education" of state and local licensing boards and prepare to meet these requirements. This may necessitate the omission of certain elective courses scheduled for the third and fourth years.

Students who intend to study medicine but are not chemistry majors should elect courses 11, 12a, and 15 which are required for admission to practically all "class A" medical schools. Courses 13 and 14b are strongly recommended if time allows.

Attention is called to laboratory fees and breakage deposits listed under the general heading "Laboratory Fees and Deposits."

GRADUATE WORK

The Department of Chemistry offers advanced courses in the fundamental principles of physical, organic, inorganic and analytical chemistry, and these are supplemented by specialized courses and research work in physical and organic chemistry. Besides a successful completion of the fundamental courses offered in the graduate school, candidates for both degrees must show facility in conducting a laboratory investigation and a command of the subject which is chosen for the thesis or dissertation.

All graduate students are required to have an adequate reading knowledge of French and German. This requirement applies to candidates for both the master's degree and the doctor's degree.

Students registered for advanced degrees are expected to spend not less than eighteen hours per week in the laboratory. This may include special laboratory work in organic, inorganic, and physical chemistry.

Graduate scholarships and fellowships are available to students in this department. Further information may be obtained from the chairman of the department.

COURSES IN CHEMISTRY

During the academic year 1948-49 the following courses were given: 11, 12a, 13, 14b, 15, 16a, 19, 112b, 116, 214b, 215, 31, 33, 34, 35, 37, 38, 315.

In 1949-50 the following courses will be offered: 11, 12a, 13, 14b, 15, 16a, 19, 112b, 116, 212b, 214b, 215, 31, 33, 35, 36, 37, 38, 315, 322.

1. PRIMARILY FOR UNDERGRADUATES

11. General Chemistry. Systematic study of the elements and their principal compounds and the fundamental laws and theories of chemistry. Three lectures and three hours of laboratory work per week.

Prerequisite for Chemistry 12, 13 and 14.

Divisible only by consent of instructor.

Through the year. M. W. F., 11; M., 2 or Th. 2. Mr. Bullock

12a. Qualitative Analysis. Chiefly laboratory work, nine hours per week. Occasional lectures and recitations.

Prerequisite: course 11.

Half course. First semester. Tu. F., 2. Mr. Martin

13. Chemical Principles and Calculations. A study of the use of chemical principles in working out problems, including the study of gases, solutions, thermochemistry and homogeneous equilibrium.

Prerequisites: Chemistry 11 and 12.

Through the year. M. W. F., 8. Mr. Martin

14b. Volumetric Analysis. Required for a major in chemistry. Chiefly laboratory work.

Prerequisite: Chemistry 12a.

Half course. Second semester. Tu.Th., 2. Mr. MacGillavry

15. Organic Chemistry. Lectures on the principles of organic chemistry and a laboratory study of the preparation and properties of important organic compounds. Three lectures and three hours of laboratory per week.

Prerequisite: a grade of C—, or better, in Chemistry 11, and Chemistry 12a.

Through the year. M. W. F., 9; Th., 2. Mr. Martell

16a. Gravimetric Analysis. Required for a major in chemistry. Chiefly laboratory work .

Prerequisite: Chemistry 14b.

Half course. First semester. Tu. W., 2. Mr. MacGillavry

19. Physical Chemistry. Principles of physical chemistry including atomic and molecular structure, gases, liquids, solutions, crystalline solids, chemical thermodynamics, homogeneous and heterogeneous equilibria, electrolytic conductance, electrode potentials, electrolysis and polarization, reaction kinetics, colloids.

Three hours of lectures and four hours of laboratory per week.

Required for a major in chemistry.

Prerequisites: Chemistry 13b, 14, Mathematics 12, Physics 11.

Through the year. Tu. Th., 10; Th. F., 2. Mr. MacGillavry

112b. Physico-Chemical Methods. An advanced laboratory course in physical chemistry.

Open to students who have taken or are taking Chemistry 19.

One lecture and six hours of laboratory work per week.

Half course. Second semester. Mr. MacGillavry

116. Advanced Organic Chemistry. Electron theory of molecular structure, reaction mechanisms, natural products and other advanced topics in organic chemistry. Laboratory work includes qualitative and quantitative organic analysis, and special problems in synthesis.

Prerequisites: Chemistry 15, 14b, and 16a.

Two lectures and 6 hours of laboratory work per week.

Through the year. M. W., 12; T. F., 2. Mr. Martell

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

212b. History of Chemistry. Outline of the historical development of the science, and the relation of chemistry to other sciences at various periods of development. Lectures, collateral reading, reports and thesis.

Open to graduate students and seniors who take or have taken Chemistry 15 and 19 or equivalent courses.

Half course. Second semester. Hours to be arranged.
Omitted, 1948-49. Mr. Martell

214b. Advanced Quantitative Analysis (including gas analysis). Lectures and laboratory work, nine hours of laboratory work per week.

Half course. Second semester. Tu. Th., 2. Mr. Bullock

215. Honors Course. Primarily for candidates for "honors in chemistry." Staff of the Department

3. PRIMARILY FOR GRADUATE STUDENTS

31. Chemical Structure and Reaction Mechanisms. Lectures on the structure and properties of chemical substances from the viewpoint of resonance and electronic structure.

Three hours, through the year. Mr. Martell

321. ADVANCED PHYSICAL CHEMISTRY. Lectures on the properties of real gases, crystalline solids, liquids, solutions of molecular compounds and strong electrolytes, in relation to chemical constitution. Homogeneous and heterogeneous equilibria, reaction kinetics, electrode potentials and processes, electrolytic conductance, surface phenomena—atomic structure.
Three hours, through the year. MR. MACGILLAVRY
Omitted, 1948-49.

322a. ELEMENTARY QUANTUM MECHANICS. Lectures on the principles of quantum and wave mechanics, with applications to electronic theory and interpretation of spectroscopic data.
Three hours. First semester. MR. MARTELL
Omitted, 1948-49.

NOTE: Course 322a and course 322b together constitute a full year course.

322b. CHEMICAL THERMODYNAMICS. Lecture on the principles of classical and statistical thermodynamics, with applications to a wide variety of chemical phenomena.
Three hours. Second semester. MR. MARTELL
Omitted, 1948-49.

33. ADVANCED ORGANIC CHEMISTRY. Lectures on selected subjects in organic chemistry.
Two hours, through the year. MR. BULLOCK

34. ADVANCED INORGANIC CHEMISTRY. Lectures on selected topics in inorganic chemistry.
Two hours, through the year. MR. MARTIN

35. SEMINAR. Staff and graduate students. Reports on research work being carried on in the laboratory and reports and discussions of recently published work in related fields.
Once a week, through the year. W., 4.
STAFF OF THE DEPARTMENT

36. PRINCIPLES OF ANALYTICAL CHEMISTRY. Lectures on the theoretical basis of analytical chemistry.
Two hours, through the year. MR. MARTIN
Omitted, 1948-49.

37a. SURFACE AND COLLOID CHEMISTRY. Lectures on colloidal phenomena and on physical chemical properties and effects of surfaces.

Three hours. First semester. M. W. F., 9. MR. MACGILLAVRY

37b. HIGH POLYMERS. Lectures on selected topics of the physical chemistry of high molecular and colloidal materials.

Three hours. Second semester. M.W.F., 9. MR. MACGILLAVRY

38. CURRENT TOPICS IN CHEMICAL LITERATURE. Required of all students who have completed a year of graduate work.

Hours to be arranged. THE STAFF

315. RESEARCH. THE STAFF

DEPARTMENT OF CLASSICS

ASSISTANT PROFESSOR BARLOW

The Department of Classics provides undergraduate courses for the acquisition of a reading knowledge of Greek and Latin and for the study of Greek and Latin literary masterpieces in their original form. In addition to the courses requiring knowledge of an ancient language, there are others given entirely in English, which deal with all phases of the Greek and Roman civilizations.

Since it may not be possible to offer courses in elementary Latin and Greek every year, students who desire to elect them should consult the instructor as far in advance as possible. Courses of a more advanced nature than those listed may be offered as occasion demands.

PRIMARILY FOR UNDERGRADUATES

GREEK

11. ELEMENTARY. Study of Greek grammar through forms syntax, vocabulary, and reading; selections from Xenophon's Anabasis.

Indivisible course.
Open to freshmen.
Through the year. Tu. Th. S., 10. MR. BARLOW
To be omitted in 1949-50.

12. PLATO, APOLOGY AND CRITO; HOMER, ILIAD. Prerequisite: Greek 11 or equivalent.

Open to freshmen.

Through the year. M. W. F., 12. MR. BARLOW

Given in English

123a. GREEK CIVILIZATION. Lectures and readings on the history, literature, philosophy, art, religion, and government of Greece, with emphasis on the elements which have contributed most to Western civilization.

Greek 123 may be counted in fulfillment of the general requirement in art, music, and literature, but not in fulfillment of the requirement in foreign language.

Open to freshmen, subject to the approval of the instructor.

Half course. First semester. Tu. Th. S., 11. MR. BARLOW

LATIN

11. ELEMENTARY. Introduction to the Latin language through study of forms, syntax, and vocabulary, with emphasis on the Latin element in English words. Reading of selections from Latin prose.

Indivisible course.

Open to freshmen.

Through the year. T. Th. S., 9. MR. BARLOW

13. SELECTIONS FROM HORACE AND CATULLUS; COMEDIES OF PLAUTUS AND TERENCE. The work of the course may begin with easy prose selections, to satisfy the lack of uniformity in preparation in secondary schools.

Prerequisite: Three or four years of Latin for admission.

Open to freshmen.

Through the year. M. W. F., 11. MR. BARLOW

Given in English

123b. Roman Civilization. Lectures and readings on the history, literature, philosophy, art, religion, law, and government of ancient Rome, with emphasis on the transmission of Greek civilization, on the developments which have contributed to Western civilization, and on the condition of the Roman Empire during the early years of the development of Christianity.

Latin 123 may be counted in fulfillment of the general requirement in art, music, and literature, but not in fulfillment of the requirement in foreign language.

Open to freshmen, subject to approval of the instructor.

Half course. Second semester. Tu. Th. S., 11. Mr. Barlow

DEPARTMENT OF ECONOMICS AND SOCIOLOGY

Professor Brandenburg, Professor Maxwell, Professor Lucas, Associate Professor Killian, Associate Professor Hargest, Assistant Professor Bowman, Mr. Schaffer, Visiting Lecturer Breen, Visiting Lecturer Green

The first aim of the department, in its undergraduate courses, is to give the student a comprehensive grasp of the underlying principles and functions of our economic and social institutions, and to develop habits of systematic and unbiased thought about these institutions. Some of the courses, however, contribute to the student's preparation for a business or professional career (Economics 13, 15a, 22, 26, etc.) and are specifically recommended to students who are candidates for the degree of Bachelor of Business Administration. Conversely, some students majoring in economics may be advised to elect certain courses in Business Administration which are credited toward the degree of Bachelor of Arts (Business Administration 16, 112, 117, 18, 124, 127, 20, 27a).

Economics 11 is a prerequisite to all other courses in economics except Economics 12, and is required of all majors in the department. Similarly Sociology 11 is a prerequisite to other courses in Sociology. Courses taken outside the department in partial fulfillment of the major requirement should be selected, subject to departmental approval, so as to provide a unified program centering about the student's major interest. Majors in economics will ordinarily be required to take Economics 205a, Intermediate Economic Theory.

Candidates for departmental honors will engage in a program of independent study consisting of reading and research designed in part to give them specialized training in the fields of their major interest and in part to supplement formal courses. Ordinarily a student will not begin his independent study until the second semester of the junior year, nor will he undertake the equivalent of more than two courses in this manner.

Courses in sociology will be found listed, with descriptions, immediately after the list of courses in economics.

In making elections, students should bear in mind that some advanced courses are offered only in alternating years.

GRADUATE WORK

Students expecting to enter upon graduate work should have mastered creditably basic courses in economics equivalent to at least four courses, including Economics 11; those whose preparation is inadequate should expect to remove the deficiency before proceeding to study for a higher degree.

A range of courses sufficient for the needs of candidates for the doctorate is offered in cycles of two or three years. Individual work, with instructors and in small intimate seminars, constitutes a goodly part of the graduate student's program. The classification of courses as undergraduate, intermediate, and graduate is necessarily an elastic one. Graduate students electing courses in the undergraduate category will be required to do additional work.

Fellowships, scholarships, assistantships, and other aids are available to a limited number of worthy students.

Attention is directed to closely allied courses offered in geography, history and international relations, and psychology.

COURSES IN ECONOMICS

During the academic year 1948-49 the following courses were given: Economics 11, 12, 13, 15a, 140b, 21a, 22, 25b, 26, 28, 205a, 207, 210a, 211b, 39, 311, 338.

Descriptions of courses listed below under the designation "Business Administration" will be found in the announcement of "Courses in Business Administration".

1. PRIMARILY FOR UNDERGRADUATES

11. PRINCIPLES OF ECONOMICS. An introduction to the fundamental economic principles, together with a study of the practical application of these principles to the problems of American life.

Indivisible course.

Through the year. M. W. F., 10 and 11.

To be offered in the Summer Term, 1949.

MR. LUCAS AND MR. SCHAFFER, ASSISTED BY MR. LECLAIR

12. INDUSTRIAL AND ECONOMIC HISTORY.

First Semester. A study of west European industry and commerce since about 1700, emphasizing developments in Britain, France and Germany.

Second Semester. Industrial and commercial history of the United States. The period prior to 1860 is studied briefly. Chief attention centers on the rise of the country as an industrial and commercial power; problems of transportation, domestic and foreign trade, tariff policy, currency and finance, industrial combinations.

For freshmen and sophomores, others by permission of the instructor.

Through the year. M. W. F., 8; 9.

MR. BRANDENBURG, ASSISTED BY MR. WHITE

BUSINESS ADMINISTRATION 112. PERSONNEL MANAGEMENT.

BUSINESS ADMINISTRATION 117. ACCOUNTING.

BUSINESS ADMINISTRATION 124. MARKETING.

BUSINESS ADMINISTRATION 127. INTERMEDIATE ACCOUNTING.

13. MONEY AND BANKING. The principles of money and banking with special reference to their functions in the present economy. The theory of value of money, control of the money market and the problem of money and credit in the world economy are given detailed consideration.

Indivisible course.

Through the year. M. W. F., 10. MR. MAXWELL

140b. CONSUMER ECONOMICS. A study of family budgets, planes of living, and other problems arising in the purchase of the customary goods and services. Emphasis is upon housing, insurance, savings, investments, consumer services supplied by advertisers, private non-commercial agencies, the government, and the cooperative movement.

Half course. Second semester. Tu. Th. S., 9. MR. BOWMAN

15a. PUBLIC FINANCE. The principles of governmental expenditures, revenues, and debts, with particular reference to the United States.

Half course. First semester. M. W. F., 9. MR. MAXWELL

BUSINESS ADMINISTRATION 16. STATISTICS.

BUSINESS ADMINISTRATION 18. BUSINESS ORGANIZATION AND FINANCE.

115b. FISCAL DEVELOPMENT OF THE UNITED STATES. This course treats the development of the functions and revenues of the federal government and of the state governments (with brief notice of municipalities). For the recent period most attention is given to federal-state fiscal interrelations in the form of federal grants-in-aid, tax conflicts and shared taxes. Recent proposals for a revision of federal-state fiscal relations both for the purpose of bringing federalism up to date and for implementing a high employment program are considered.

Prerequisite: Economics 11, or concurrent enrollment.

Half course. Second semester. MR. MAXWELL

Omitted, 1948-49.

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

Business Administration 20. Business Law.

205a. Intermediate Economic Theory. An analysis of contemporary economic theory, with attention to consumer demand, production, factor demand, prices, market structure, and aggregate economics.

Half course. First Semester. T. Th., 2:30-4. Mr. Schaffer

206b. Economics of Industry. Analysis of several key American industries—oil, steel, automobile, etc.

Half course. Second Semester. Tu Th. S. to be arranged. Mr. Schaffer

21a. Business Cycles. A study of the economics of depression, full employment and inflation under capitalism. Special emphasis on the work of J. M. Keynes and other contemporaries.

Half course. First Semester. Tu. Th. S., 10. Mr. Schaffer

21b. Business Cycles. Analysis of recurrent business fluctuations differentiating the typical business cycle and its phases. Treatment of the history, theories of causation and proposals for control of the business cycle.

Prerequisite: Economics 21a.

Half course. Second Semester. Tu. Th. S., 10. Mr. Schaffer

210a. Economic and Social Reform. A study of how societies seek to solve basic economic problems. General emphasis on free enterprise, planning and contemporary industrial organization oriented towards an improved understanding of the American economy.

Half course. First Semester. Tu. Th. S., 11. Mr. Schaffer

211b. Comparative Economic Systems. An analysis of contemporary and recent industrialized economic systems, particularly Great Britain, U.S.S.R., Nazi Germany, Fascist Italy, and Sweden. Followed by a critique of reform movements and policy for the American scene.

Prerequisite: Economics 211a or Permission of Instructor.

Half course. Second Semester. Tu. Th. S., 11. Mr. Schaffer

22. Labor Problems. A study of the development of worker and employer organizations, collective bargaining, industrial disputes and methods of prevention and settlement. The second semester is devoted largely to the study of legislative control of industrial relationships and the Social Security program.

Through the year. M. W. F., 11. Mr. Brandenburg

25b. Problems in Public Finance. This course deals mainly with problems of post-war taxation and fiscal policy. The theory underlying the so-called "full employment" act of 1946 is discussed, along with methods by which it may be implemented. Other questions for examination are reform of the federal corporate income tax and death duties, incentive taxation, federal debt policy, the capital budget, federal budgetary procedure.

Half course. Second semester. M. W. F., 9. Mr. Maxwell

26. Government and Industry. An analysis of the proper function of government in controlling economic activity, including theories of control, historical development of control, and such special problems as the regulation of trusts, public utilities, and railroads.

Through the year. M. W., 2-3:30. Mr. Lucas

207. International Economics. An examination of traditional international economic theory, and its more recent developments which take into account underemployment and imperfect competition. The application of these theories, and of the lessons of history, to problems arising out of post-war institutions and projects, and the future of world trade.

Through the year. T. Th. S., 9. Mr. Green

Business Administration 27a. International Trade and Finance.

27b. Problems of International Trade and Finance. An extension of Bus. Adm. 27a to a study of recent and current developments: barriers to movement of international trade, Reciprocal Trade Agreements Act, the recent World Trade Organization; problems involved in the international transfer of funds, control of foreign exchanges, the function of the International Bank for

Reconstruction, the International Monetary Fund and other similar topics.

Half course. Second semester.

Omitted 1948-49.

28. RESEARCH IN SELECTED ECONOMIC PROBLEMS. Includes departmental honors work and other individual projects completed for credit.

Hours as arranged. THE STAFF OF THE DEPARTMENT

29a. ECONOMICS OF TRANSPORTATION. A study of the development of the transportation system of the United States; its contemporary structure, importance, and economic aspects; the development of public control. Railway rate making and standards therefor; railway combinations and proposals for consolidation; railway labor problems.

Half course. First semester.

Omitted, 1948-49.

3. PRIMARILY FOR GRADUATE STUDENTS

31. INTERNATIONAL ECONOMIC POLICIES.

Omitted, 1948-49. MR. BRANDENBURG

39. ECONOMIC THEORY. Analysis of the theories of representative economists. Most attention is given to Smith, Riccardo, Mill, Marshall, Clark, Chamberlin, Keynes.

Through the year. W. F., 2-3:30. MR. MAXWELL

Research courses are offered to meet the needs of the individual students for work not presented in regularly scheduled courses.

311. SEMINAR. STAFF OF THE DEPARTMENT

322. RESEARCH IN LABOR. MR. BRANDENBURG

325. RESEARCH IN PUBLIC FINANCE AND MONEY AND BANKING. MR. MAXWELL

326. RESEARCH IN BUSINESS ORGANIZATION AND GOVERNMENT CONTROL OF BUSINESS. MR. LUCAS

327. RESEARCH IN INTERNATIONAL TRADE AND FINANCE. TO BE ARRANGED

338. THESIS. STAFF OF THE DEPARTMENT

SOCIOLOGY

An undergraduate major is not offered in sociology alone; a student whose primary interest is in sociology may, however, meet the departmental requirement for a major by completing Economics 11 and three or four courses in sociology together with three or two approved courses in related departments. Geography 27 a and b, History 10 and Psychology 200 are particularly recommended for this purpose.

COURSES IN SOCIOLOGY

During the academic year 1948-49 the following courses were given: 11, 12a, 24b, 25, 28.

1. PRIMARILY FOR UNDERGRADUATES

11a. PRINCIPLES OF SOCIOLOGY.

First Semester—*Social Organization.*

The study of social structure and of social interaction. Biological, geographical and cultural basis of man and his social life. Tribe, clan, community, society, folkways, mores, class, caste, and race.

11b. PRINCIPLES OF SOCIOLOGY.

Second Semester—*Social Disorganization.*

A study of the effects of social and cultural change from primary to secondary group life. The effects of mobility, urbanization and secularization. Problems of the person in society; dependency, sickness, population, divorce, politics, religion, minority groups.

Prerequisite for further work in sociology.

Year course. Tu. Th. S., 11. MR. KILLIAN

12a. INTRODUCTION TO CULTURAL ANTHROPOLOGY.

The evolution and development of man and his culture: Basic concepts; the races of man and their distribution; process of adaptation and adjustment through culture; primitive, historic and modern culture complexes compared; divergence, transmission, and function of culture; origin and growth of civilizations; contemporary pre-literate peoples; relationship of anthropology to the other social sciences.

Half course. First semester. Tu. Th., 2-3:30. MR. KILLIAN

To be omitted 1949-50. To be offered Summer Term 1949.

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

21a. The Family and Society.

A study of the form and function of the family at different culture levels; the influence of geographic, biological, demographic and cultural forces; secondary groups and the family; rural and urban family.

Half course. First semester. Mr. Killian

Omitted, 1948-49. To be offered in the Summer Term, 1949.

22b. Race and Nationality.

The meaning of race; the distribution of ethnic groups; ethnic group characteristics—biological and environmental theories. The meaning of nationality; early types of immigrants in America; the cultural backgrounds of the earlier Americans. American minority groups and problems—the Negro, the Jew and other minority groups. The effects of later immigration; immigration restrictions and the quota system; displaced persons and proposed legislative control measures; prospective future of the American population.

Half course. Second semester. Mr. Killian

Omitted 1948-49.

23a. Crime and Delinquency.

Study of the explanations for crime and delinquency; history of punishment; other methods of control. Survey of the English and American criminal law and administration of criminal justice; development of penal and correctional methods including probation, parole, release procedure; the juvenile court. Proposals for youth courts and youth correction authorities. Emphasis on crime as a system of behavior. Proposals for dealing with crime and delinquency.

Half course. First semester. Tu. Th., 2-3:15. Mr. Killian

Omitted, 1948-49.

24b. Community Organization.

The contemporary American urban and rural community in action. Nature and types of community; its place in history. Organization of communities in rural and urban life. Community studies and surveys. The constellation of community social agencies. The field of social work, recreation and welfare. Community chests and councils. Sociology and community organization.

Half course. Second semester. Tu. Th., 2-3:30. Mr. Killian

25. Social Institutions.

A study of the institutional complex in the social order—its history and development, its relation to the process of socialization and to mind, the emergence of standards and norms of control; the family—its basic character, systems of belief—primitive magic to contemporary religious faiths; education; property and other legal and political concepts, etc.; the interrelations, interdependence and significance, especially for the Western World, of institutional forms and processes.

Indivisible course.

Prerequisites: Soc. 12a or permission of instructor.

Through the year. Tu. Th. S., 10. Mr. Killian

28. Research in Selected Sociological Fields.

Includes departmental honors work and other individual projects completed for credit.

See also: Economics 12, 140b, 210a, 22.

3. PRIMARILY FOR GRADUATE STUDENTS

38. Research. Social Theory and selected problems.

See also; Economics 311, 322.

COURSES IN EDUCATION

A description of the offerings in Education and a list of courses in Education will be found in the announcement of the Department of Psychology and Education.

DEPARTMENT OF ENGLISH

Professor Dodd, Professor Illingworth, Associate Professor Marble, Assistant Professor Anderson, Mr. Letendre, Mr. Moore, and Mr. Abbott

English 11 through the year is required of all freshmen for the degree of Bachelor of Arts. The first semester is prerequisite to the second semester.

A major in English consists of seven courses in addition to English 11. Every English major must take all three semesters of English 15 and two and one-half other courses in English, two of which must be courses open only to juniors and seniors. As the three courses in allied fields, each English major must take History 10, a year course in Philosophy, and one other course approved by the department (preferably History 12, French 113, German 141, or Greek 123a and Latin 123b).

The only English courses open to freshmen are English 11 and 142b. For English majors, English 15 is prerequisite to all other English courses except English 11, 111, and 142b. English 17 is designed especially for non-English majors, though English 15, 111, and other courses with the consent of the instructor are open to them.

If at least two units of elementary Latin or elementary Greek have not been accepted for admission to college, the English major must satisfy this requirement as prescribed on page 67 of the Catalogue.

English majors should follow as closely as possible the following program:

First year
- English 11
- Group A
- Group B (History 10)
- Foreign language
- One elective (Fine Arts requirement recommended)

Second year
- English 15, Parts I and II
- English 111 (recommended)
- Group A
- Group B
- Foreign language

Third year
- English 15, Part III
- One semester of Shakespeare
- English 18a or 18b (18a recommended)
- One half-course in English (from group of courses open only to juniors and seniors)
- Foreign Language
- Philosophy (any one course)
- One elective (one of the following recommended: French 113, German 141, History 12, Greek 123a and Latin 123b, Music 12)

Fourth year
- Two half-courses in English (one of which must be chosen from group of courses open only to juniors and seniors)
- Four half courses in English (recommended)
- Two electives

An English major planning to do graduate work in English should include in his program English 10, 13, 18a, History 12, and at least two English courses beyond the required four.

The Prentiss Cheney Hoyt Prize in Poetry

A prize of fifteen dollars is awarded annually by the Department of English for the best poem by an undergraduate. This is the interest on a fund established by the alumni as a memorial to Prentiss Cheney Hoyt, Professor of English at Clark University from 1909 to 1920.

COURSES IN ENGLISH

During the academic year 1948-1949 the following courses were given: 11, 12, 13b, 15, 16, 18, 110, 111b, 113b, 122b, 124a, 125a, 126b, 131b, 133a, 142, and for the Division of Business Administration B.A. 14b and B.A. 17.

I. COMPOSITION COURSES

11. Composition and Literature. The purpose of English 11 is to develop clarity and accuracy in reading and writing. The first semester emphasizes exposition and includes an introduction to fiction. The second semester is devoted to the study of drama and poetry. Throughout the year expository themes and conferences with the instructor are required.

Required of freshmen.

Through the year. M. W. F., 9; 10; 11; 12. Tu. Th. S., 9; 10; 11.

Mr. Abbott, Mr. Anderson, Mr. Letendre,
Mr. Marble and Mr. Moore

16. Advanced Composition. A critical study of the literary techniques of narration, description, argumentation, and exposition. Supervised writing.

16a is prerequisite to 16b.

Through the year. M. W. F., 10, first semester; Tu. Th., 2-3:30, second semester. MR. ABBOTT AND MR. MOORE

II. LITERATURE COURSES

A. SURVEYS AND OTHER GENERAL COURSES

15. A SURVEY OF ENGLISH LITERATURE. A course in English literature from its beginning to the present time.

This course runs through three semesters as follows:

a.	Beginning to 1660 (first semester)	MR. ANDERSON
b.	1660 to 1832 (second semester)	MR. MOORE
c.	1832 to the present (first semester)	MR. MARBLE

Divisible for non-English majors.

Both English 15 and 17 cannot be counted toward the A.B. degree. M. W. F., 11.

17. GREAT ENGLISH AND AMERICAN WRITERS. This course is intended primarily for non-English majors who wish to take an English course beyond English 11. Instead of tracing the historical development of English literature as English 15 does, this course will consider in detail about fourteen of the more prominent English and American writers.

17a. Chaucer, Shakespeare, Milton, Swift, Wordsworth, Emerson, and Hawthorne.

17b. Tennyson, Browning, Thackeray, Mark Twain, Hardy, Shaw, and three modern poets.
Divisible.
Both English 15 and 17 cannot be counted toward the A.B. degree.
M. W. F., 10. MR. ANDERSON AND MR. MARBLE

18. THE BIBLE AS LITERATURE. First semester, Old Testament; second semester, New Testament.
M. W. F., 10. MR. ILLINGWORTH

111. A SURVEY OF AMERICAN LITERATURE. A course in American literature from Puritan times to the present.
Indivisible course.
Through the year. Tu. Th. S., 11.
Formerly a semester course, English 111b.
MR. ANDERSON AND MR. LETENDRE

113a. BRITISH DRAMA. A survey of the British drama from the beginning to 1900.
Half course. First semester. Tu. Th. S., 9. MR. LETENDRE
Formerly English 113b, Mr. Dodd.

121b. BIOGRAPHY AND LETTERS. The biography, autobiography, and correspondence of distinguished authors, painters, and sculptors, from the eighteenth century to the present.
Half course. Second semester. MR. DODD
Omitted, 1948-49. To be omitted in 1949-50.

124a. AMERICAN DRAMA. A study of the American drama from colonial times to the present.
Half course. First semester. M. W. F., 9. MR. LETENDRE
In 1949-50, this course will be supplanted by English 111b.

125a. THE SHORT STORY. Representative short stories in English and American literature.
Half course. First semester. MR. DODD
To be omitted in 1949-50.

133b. A HISTORY OF LITERARY CRITICISM.
Half course. Second semester. M. W. F., 10. MR. MARBLE
Given as English 133a, 1948-49.

140a. THE APPRECIATION OF LITERATURE. An analysis of the principal types of literature.
Half course. First semester. MR. ILLINGWORTH
Omitted, 1948-49. To be omitted in 1949-50.

142a. THE ENGLISH NOVEL. A study of the novel from its beginning to Thomas Hardy.
Half course. First semester. M. W. F., 8. MR. ILLINGWORTH

B. SPECIAL PERIODS OR INDIVIDUAL AUTHORS

10b. CHAUCER. After a study of the text of two or three of the *Canterbury Tales,* the main works of Chaucer are read more rapidly. The student is also introduced to Middle English grammar and is given drill in reading Chaucer aloud.

Half course. Second semester. Tu. Th. S., 11. MR. ANDERSON
Formerly English 131b.
To be omitted in 1949-50.

13b. SHAKESPEARE. A study of the development of Shakespeare as a dramatist. Twelve plays are studied, with the main emphasis on *Hamlet, Othello, Lear,* and *Macbeth.*

Half course. Second semester. Tu. Th. S., 11 or M. W. F., 10.
MR. ANDERSON OR MR. MARBLE

14b. ELIZABETHAN DRAMA.

Half course. Second semester. M. W. F., 11. MR. MARBLE
Omitted, 1948-49.

104a. MILTON AND THE SEVENTEENTH CENTURY. Special emphasis in this course will be placed on the significant intellectual and literary issues of the seventeenth century, and on the development and expansion of modern literary types in that period.

Half course. First semester. M. W. F., 9. MR. ABBOTT
Omitted, 1948-49.

105b. EIGHTEENTH CENTURY. A study of English literature from the end of the Restoration Period to the beginning of the Romantic Movement.

Half course. Second semester. MR. ABBOTT
Omitted, 1948-49. To be omitted in 1949-50.

110. VICTORIAN PROSE AND POETRY. First semester, poetry; second semester, prose. The first semester may be taken independently.

Through the year. M. W. F., 10. MR. MARBLE
In 1949-50 this course will be supplanted by English 15c.

117a. ENGLISH ROMANTIC POETRY. Wordsworth, Coleridge, Byron, Shelley and Keats, with a consideration of the intellectual background of their time.

Half course. First semester. MR. MOORE

Omitted, 1948-49. To be omitted in 1949-50.

122b. MODERN POETRY. A study, in representative contemporary poets, of the new tendencies in verse. Opportunity is afforded for original verse composition.

Open only to upper classmen who are proficient in English.

Half course. Second semester. T. Th. S., 9. MR. DODD

To be omitted in 1949-50.

126a. MODERN DRAMA. Types of modern British, Continental, and American drama.

Half course. First semester. MR. LETENDRE

To be omitted in 1949-50.

126b. MODERN CONTINENTAL DRAMA. A survey of European drama from Ibsen to the present.

Half course. Second semester. MR. LETENDRE

To be omitted in 1949-50.

142b. THE MODERN NOVEL. A comparative study of representative twentieth century novels of Russia, Germany, France, Sweden, England, and the United States to show how different cultures have treated this vehicle of literary expression.

Half course. Second semester. M. W. F., 8. MR. ILLINGWORTH

III. PUBLIC SPEAKING AND DRAMATICS

12. PUBLIC SPEAKING. A course in the composition and delivery of the most commonly used speeches, parliamentary procedure, discussion groups, and vocabulary drill.

Indivisible course.

Through the year. M. W. F., 9. MR. ILLINGWORTH

145a. STAGECRAFT. A study of the principles and problems involved in producing plays. Practical experience will be given through laboratory work and public performances.

Half course. First semester. MR. ILLINGWORTH

Omitted, 1948-49.

145b. ACTING. Develops the actor from a close study of his basic requirements. An analysis of the emotions, "business," pantomime, and interpretation given in theory and practice.

Half course. Second semester. MR. ILLINGWORTH
Omitted, 1948-49.

146b. ORAL INTERPRETATION OF LITERATURE. A course stressing the imagination and the dramatic instinct as fundamental sources of good oral and pantomimic expression. The intellectual elements of vocal expression are studied with special reference to phrasing, inflection, and emphasis; individual and choral speaking.

Permission of the instructor is a condition for enrolling in this course.

Half course. Second semester. MR. ILLINGWORTH
Omitted, 1948-49.

147b. THE ORAL INTERPRETATION OF SHAKESPEARE. The life of Elizabethan England with special emphasis on the theatre of Shakespeare. Recordings of such actors as Paul Robeson, Maurice Evans, John Gielgud, and Orson Welles. The plays to be read will include *Hamlet, Cymbeline, Julius Caesar, King Lear, Othello, The Comedy of Errors, Merchant of Venice, Taming of the Shrew, As You Like It, Henry V and Richard II.*

Half course. Second semester. MR. ILLINGWORTH
Omitted, 1948-49.

DEPARTMENT OF FINE ARTS

PROFESSOR DODD, PROFESSOR BOSSHARD, PROFESSOR ILLINGWORTH, PROFESSOR (AFFILIATE) STOUT, ASSOCIATE PROFESSOR BARLOW, ASSOCIATE PROFESSOR NICOL, ASSOCIATE PROFESSOR (AFFILIATE) BARNETT, ASSISTANT PROFESSOR JOHNSON

A student who intends to major in the visual arts or who intends to offer courses in the visual arts as a part of a major in another department is expected to take the course Fine Arts before electing other courses in this field.

A major in the visual arts will consist of:

1) The basic course, Fine Arts 1, to be completed before the end of the sophomore year.
2) Fine Arts 10, 11, 13, 15.
3) Music 12.
4) One course chosen from the following list: French 113, German 141, Greek 123 and Latin 123.
5) History 10, completed before the end of the sophomore year.
6) History 11A.

COURSES IN FINE ARTS

During the academic year for 1947-48 the following courses in Fine Arts have been given: 10, 13, 111, and Music 12.

1. PRIMARILY FOR UNDERGRADUATES

Fine Arts 1. Introduction to Representation and Design. Problems of the artist, particularly in relation to drawing and painting, considered in terms of theory, technical application, and historical development. Studio work, gallery talks, lectures, discussions, and assigned reading.

A fee of $10 each semester in addition to the regular tuition is charged for this course. There is also an initial expense, estimated at about $10, for drawing and painting materials and a small continuing expense for replacements.

Open to freshmen.

Through the year. Six hours per week at the School of the Worcester Art Museum, with additional assigned study. M. Tu., 2-5.

Mr. Stout, Mr. Barnett, Mr. Hovsepian

Fine Arts 10a. The Art of My Country. American accomplishment in painting, sculpture and architecture. Illustrated lectures, assigned readings. Field trips are required.

Open to freshmen.

First semster. M. W. F., 9. Mr. Dodd

FINE ARTS. 11b. FRENCH AND ENGLISH PAINTING, 18TH AND 19TH CENTURIES. Field trips are required. Fine Arts 10 is a prerequisite for freshmen, who are admitted only in special cases, at the discretion of the instructor.

Half course. Second semester. M. W. F., 9. MR. DODD

Omitted, 1948-49.

FINE ARTS 13b. PAINTING IN EUROPE IN THE 17TH CENTURY. The trends that led, among others, to El Greco and Velasquez, Rembrandt, and Hals, Rubens and Van Dyck. Field trips are required.

Half course. Second semester. M. W. F., 9. MR. DODD

FINE ARTS 15b. THE ITALIAN RENAISSANCE. Painting, sculpture, and architecture in the era of Italy's greatest achievements in the arts. Field trips are required.

Half course. Second semester. M. W. F., 9. MR. DODD

Omitted 1948-49.

MUSIC 12. A SURVEY COURSE IN FORM AND STYLE. Beginning with the genesis of sonata-form, the course extends to the beginning of the twentieth century. The Vienna classicists, the romantic movement, the rise of impressionism, and the so-called modernists are treated in various types of music heard in concert-hall, opera house, and over the radio.

An indivisible course except that qualified students may be admitted for the second semester with the consent of the instructor.

Elective for sophomores, juniors, and seniors.

Through the year. M. W. F., 11 and 12 (2 sections).

MR. H. E. JOHNSON

MUSIC 13. THE OPERA. A course in the evolution of opera from Peri's *Dafne* to Berg's *Wozzeck*. A large repertory of major scores is studied with such historical and literary backgrounds as may conveniently be applied.

Elective for sophomores, juniors, and seniors.

Through the year. MR. H. E. JOHNSON

Omitted, 1948-49.

Music 14a. The Life and Works of Beethoven. A formal and stylistic analysis of major works by music's most inspired prophet of the nineteenth century. There is intensive score-reading. The biographical material is widened to include the unique relationship of Beethoven's creative work to the changing times in which he lived. Music 12, or some previous interest in music is prerequisite.

Half course, first semester. Tu. Th. S., 10.

To be omitted, 1949-50. Mr. H. E. Johnson

Music 15b. Twentieth Century Music. The changing concepts of musical form and style parallel those in the visual arts and are closely related. Beginning most conspicuously with Debussy, the newer idioms are traced in this course to the present day through careful study of works by Ravel, Stravinsky, Hindemith, Copland, Berg, Schönberg, Harris and many others whose scores have significance for their time. Music 12 or some acquaintance with the literature of music is prerequisite.

Elective for sophomores, juniors, and seniors.

Half course. Second semester. Tu Th. S., 10.

Mr. H. E. Johnson

Music 15a. Music to 1750. A course in early music from its primitive stages, through the Middle Ages, and the productive 14th-16th centuries, culminating in the masterworks of Bach and Händel. As in all music courses, emphasis is placed on forms and styles. Music 12 or some acquaintance with the literature of music is prerequisite.

Elective for sophomores, juniors, and seniors.

Half course. First semester. Tu. Th. S., 10. Mr. H. E. Johnson

Omitted, 1948-49.

French 113. Introduction to French Civilization. A selective survey of the history, art, and literature of France, from the Middle Ages to the present time, given in coöperation with the Worcester Art Museum.

Through the year. Tu. Th. S., 11. Mr. Nicol

German 141. Germanic Civilization. Mr. Bosshard

Omitted, 1948-49. To be omitted in 1949-50.

GREEK 123a. GREEK CIVILIZATION.
Half course. First semester. Tu. Th. S., 11. MR. BARLOW

LATIN 123b. ROMAN CIVILIZATION.
Half course. Second semester. Tu. Th. S., 11. MR. BARLOW

ENGLISH 145a. STAGECRAFT. MR. ILLINGWORTH
Half course. First semester.
Omitted, 1948-49.

COURSES IN FRENCH

A description of the offerings in French and a list of courses in French will be found in the announcement of the Department of Romance Languages.

COURSES IN GEOGRAPHY

A complete statement of the organization and special requirements in the Graduate School of Geography will be found in an earlier section of the catalog under the heading, The Graduate School of Geography. The courses which were given in 1948-49, and the offerings for 1949-50 are listed below.

UNDERGRADUATE PROGRAMS

Undergraduates planning to major in geography or to enter graduate work in geography are urged to consult the geography staff early in their undergraduate courses, to plan suitable programs including essential courses in related fields.

Majors in geography are required to take seven year-courses, or the equivalent, in geography and related fields. At least four, and not more than five of these courses must be in geography.

Geography 10, Principles of Geography, is usually taken in the freshman year (or as early as possible after the major subject is chosen to be geography). One or two of the following courses may be taken during the sophomore year: Geography 12a—Introduction to Climatology, Geography 16—Economic Geography, Geography

191—Cartography. Regional Courses in geography, such as 18—Geography of New England, 182(a)—Geography of North America, 183(b)—Geography of South America, 184—Geography of the Americas, 185—Geography of Europe, should not be undertaken until the junior or senior years.

Juniors of superior standing and seniors may be accepted, by special permission to take number "2" geography courses, such as 27(a)—Human Geography, 27(b)—Cultural Geography, 201—Political Geography, 20(b)—Geography in Education (primarily for those expecting to teach).

Courses in Fields Related to Geography

Students majoring in geography should plan early to take the required courses in other fields in order to possess the prerequisites for admission to advanced related courses in their junior and senior years to parallel the courses in their geography program.

The very nature of geography permits a rather wide selection of related courses. However, courses in history, economics, geology, biology, physics, are usually acceptable.

Geology 12, Biology 11, History 10, or Physics 11 may be taken in the freshman year; Economics 11, Government 15 or History 12 in the sophomore year. More advanced work in the fields mentioned will depend largely upon the individual student's interest and desires.

"Honors Work" in Geography

The Clark University Graduate School of Geography offers opportunity to properly qualified students for advanced training in geography. The staff, composed of specialists in their various fields of geography offer regular courses in instruction and direct advanced students in research work. Hence, a junior or senior pursuing an "honors program" in geography is afforded an opportunity to associate with other students in the Graduate School of Geography. For example, a superior student may undertake 391—Advanced Cartography, 314—Physiography of the Western Hemisphere, 34—Biogeography, 32—Climatology, 36—Problems of Economic Geography, and some graduate regional courses. On rare occasions an undergraduate student has been invited to participate in the Fall Field Camp of the Graduate School.

Independent research projects may be undertaken with the adviser in constant surveillance. This research work may be in the fields of human geography, physiography, geography in education, economic geography, land utilization, and regional geography. Such research work must be completed within the semester in which it is started, or proof advanced that the study warrants more time.

When the Senior Survey is set up all honor students will be required to participate. The staff also conducts an oral examination of at least one hour's length to ascertain the achievement of the honors student.

Courses in Geography

1. PRIMARILY FOR UNDERGRADUATES

10. Principles of Geography. An introductory course dealing primarily with the physical phases of geography and the application of the principles of geography to the study of selected regions throughout the world.

Through the year. M. W. F., 10. Mr. Warman

12a. Introduction to Climatology. Elements of meteorology and climatology with practical exercises. Emphasis on most recent theories; explanation of distribution of types of climate.

Prerequisite: Geography 10 or equivalent.

Half course. First semester. T. Th. S., 11. Mr. Warman

16. Economic Geography. A study of the distribution of people and of their economic activities organized on a regional basis, beginning with North America and continuing through the other continents.

Prerequisite: Geography 10 or Economics 11, or equivalent.

Through the year. Tu. Th. S., 9. Mr. Murphy

18. Geography of New England. A field and lecture course with special emphasis, in the first semester, on Worcester and vicinity. In the first semester, class meetings begin October 11, following the field camp. Because of the late beginning, three special week-end

field trips of three hours each, with carefully prepared reports of each, are required.

Indivisible course.

Prerequisites: Geography 10 and Geology 12, or equivalent.

Through the year. M. W. F., 9. MR. LOUGEE

282b. GEOGRAPHY OF NORTH AMERICA. A systematic regional treatment of the physical, economic, and cultural geography of North America.

Half course. Second semester. T. Th. S., 11. MR. WARMAN

285b. GEOGRAPHY OF EUROPE. Intensive survey of the continent and detailed study of selected regions.

Half course. Second semester. M. W. F., 11. MR. VAN VALKENBURG

191, CARTOGRAPHY AND GRAPHICS. Preparation of maps, graphs, charts, and block drawings.

Through the year. M., 3-5; W., 12. MR. BURNHAM

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

27a. HUMAN GEOGRAPHY. Considers influence and effect of location, area, relief, coastline, drainage systems, climate, and other geographic factors, separately, and in their mutual interaction upon the economic, social, and political development of peoples and states.

Juniors of superior standing and seniors may be accepted, by special permission.

Half course. First semester. M. W. F., 11 MR. VAN VALKENBURG

27b. CULTURAL GEOGRAPHY. Summarizes the role that geographic factors have played in the evolution of races and cultures, artifacts and institutions.

Juniors of superior standing and seniors may be accepted, by special permission.

Half course. Second semester. M. W. F., 11. MR. EKBLAW

201. POLITICAL GEOGRAPHY. Study of major political problems of the world as related to geographic factors. Application of principles to international relations of selected regions.

Through the year. Tu. Th. S., 10. MR. VAN VALKENBURG

20b. GEOGRAPHY IN EDUCATION. A survey of geography in the present-day American school system, designed to meet the needs of those expected to teach geography.

This class holds its meetings in the late afternoon so that teachers in public and private schools may be able to attend.

Half course. Second semester. M., 4-6. MR. WARMAN

291. CARTOGRAPHY AND GRAPHICS.

Through the year. MR. BURNHAM

3. PRIMARILY FOR GRADUATE STUDENTS

30. SEMINAR. Hours to be arranged. THE STAFF

32. REGIONAL CLIMATOLOGY. A study of the climates of the world by major regional examples.

Two hours, through the year. M. W., 8. MR. VAN VALKENBURG

33a. SOIL GEOGRAPHY. Reviews development and character of soils, their distribution and economic significance, in the light of their geographical relationships.

Three hours, first semester. MR. EKBLAW

Omitted, 1948-49. To be omitted in 1949-50. To be offered in 1950-51.

33b. LAND UTILIZATION AND PLANNING. Outlines relationships that physical and cultural factors bear to purpose and pattern of land uses, conservation of land resources, and basic elements of land planning.

Three hours, second semester. M. W. F., 9. MR. EKBLAW

To be omitted in 1949-50. To be offered in 1950-51.

34a. BIOGEOGRAPHY. Geographic significance of character, function, distribution, and relationships of plant and animal forms and societies in their adjustments to environment.

Three hours. First semester. M. W. F., 9. MR. EKBLAW

Omitted, 1948-49. To be offered in 1949-50. To be omitted in 1950-51.

34b. LIFE ZONES AND REGIONS. Major life zones, plant associations, and animal societies, regionally considered in relation to the elements of climate and terrain; and their effect on man's activities.

Prerequisite: Geography 34a.

Three hours. Second semester. M. W. F., 9. MR. EKBLAW

Omitted, 1948-49. To be offered in 1949-50. To be omitted in 1950-51.

36. PROBLEMS IN ECONOMIC GEOGRAPHY. An advanced study of economic geography, dealing especially with mining, agriculture, and manufacturing. Emphasis upon research methods and techniques.

Two hours, through the year. M. W., 10. MR. MURPHY

39. HISTORICAL BACKGROUND OF GEOGRAPHY. A series of lectures on European and American phases.

Hours to be arranged. MR. VAN VALKENBURG AND MR. EKBLAW

300. PH.D. SEMINAR. Hours to be arranged.

MR. VAN VALKENBURG

311b. OCEANOGRAPHY. The study of the Oceans from the standpoint of the great basins, their inherent characteristics and their economic worth. Non-credit course. MR. TURNER AND MR. AYERS

314. REGIONAL PHYSIOGRAPHY OF WESTERN HEMISPHERE. A study of selected areas within the major physiographic regions. Laboratory interpretation of maps and aerial photographs.

Two hours of lecture and two hours in the laboratory weekly.

Through the year. Tu. Th., 9. MR. LOUGEE

Omitted, 1948-49. To be offered in 1949-50. To be omitted in 1950-51.

315. REGIONAL PHYSIOGRAPHY OF THE EASTERN HEMISPHERE. A study of selected areas within the major physiographic regions. Laboratory interpretation of maps and aerial photographs.

Two hours of lectures and two hours of laboratory weekly.

Through the year. Tu. Th., 9. MR. LOUGEE

To be omitted in 1949-50. To be offered in 1950-51.

361a. URBAN GEOGRAPHY. The modern city from the viewpoint of geography.
Two hours. First semester. Tu. Th., 11. MR. MURPHY

383a. GEOGRAPHY OF MIDDLE AMERICA. Historical background of the republics and islands of the Caribbean; analysis of selected important regions; increasing importance of the Caribbean area in commercial and political relations.
Two hours, first semester. Tu. Th., 2. MR. WARMAN

383b. GEOGRAPHY OF SOUTH AMERICA. Analysis of the major geographic regions of South America; special geographic problems of South American governments.
Two hours, second semester. Tu. Th., 2. MR. WARMAN

385. GEOGRAPHY OF EURASIA. Intensive survey of the continents and detailed study of selected regions.
Through the year. M. W., 2. MR. VAN VALKENBURG
Omitted, 1948-49. To be omitted in 1949-50.

387b. GEOGRAPHY OF THE PACIFIC AREA. A regional treatment of the human geography of the islands of the Pacific.
Two hours. Second semester. Tu. Th., 11. MR. MURPHY

391. CARTOGRAPHIC PRESENTATION OF THE GEOGRAPHICAL LANDSCAPE.
Through the year. F., 2:30 to 4:30. MR. RAISZ

399a. FIELD METHODS AND STUDIES. Required of every graduate student.
First three weeks of every year. THE STAFF

RESEARCH COURSES

200.	GEOGRAPHY IN EDUCATION	MR. WARMAN
310.	REGIONAL PHYSIOGRAPHY.	MR. LOUGEE
320.	CLIMATOLOGY.	MR. VAN VALKENBURG
330.	SOILS GEOGRAPHY.	MR. EKBLAW

340.	Biogeography.	Mr. Ekblaw
350.	Agricultural Geography or Land Utilization.	Mr. Ekblaw
360.	Economic Geography.	Mr. Murphy
360b.	Urban Geography.	Mr. Murphy
370.	Human Geography and Demography.	Mr. Ekblaw
380.	Regional Geography.	The Staff
390.	Political Geography.	Mr. Van Valkenburg

DEPARTMENT OF GEOLOGY

PROFESSOR LITTLE

During the academic year 1948-49 only course 12 was given.

1. PRIMARILY FOR UNDERGRADUATES

12. General Geology. A course dealing with the origin of scenery, the classification and interpretation of rocks, the structure of the earth, the geography of the past, and the evolution of life.

Three recitations and one laboratory period or field trip weekly. Attendance on one out-of-town field trip lasting two to four days is required.

Indivisible course.

Through the year. M. W. F., 8; Th. 2. Mr. Little

121b. Crystallography, Mineralogy, and Blowpipe Analysis. An elementary course on the identification of minerals by their geometrical, physical, and chemical properties. Two class meetings and one laboratory period weekly. General geology is not a prerequisite for this course. Mr. Little

Omitted, 1948-49.

122b. Economic Geology. A course dealing primarily with the origin of the deposits of useful minerals with some reference to their more important occurrences throughout the world. Elementary chemistry and geology provide a desirable background for this course. Two class meetings and one laboratory period weekly.

Geology 121 is a prerequisite. Mr. Little

Omitted, 1948-49.

DEPARTMENT OF GERMAN

Professor Bosshard, Associate Professor Palmer,*
Assistant Professor Edwards, Mr. Loewy

The Department of German provides undergraduate courses for the acquisition of a reading and speaking knowledge of German and for the study of German literature and Germanic civilization.

German 11, 12, 13 form a regular sequence leading to a reading knowledge.

The language requirement for the Degree of Bachelor of Arts may be fulfilled by German 13 or a literature course with stated prerequisites. The department may, when justified by the exceptional preparation or objectives of a student, permit German 123 to take the place of 13 for the fulfillment of the language requirement.

The seven courses required for a major should include the two literature courses, German 152 and 153, prerequisites to these courses, and one course in another language department. Elective courses should be approved by the department.

Attention to correct pronunciation and writing is given in all language and literature courses. The recording machine and gramophone are used in all classes to assist in the acquisition of correct pronunciation.

The Germanic Society is an organization of students which provides an informal meeting ground for all those within the campus community interested in the German language and culture. It fosters speaking, singing and reading German; it produces a German language play each year and presents a series of monthly evening programs, consisting of German films, playlets, group singing and the like. It provides lectures and discussions in German from time to time on various aspects of Germanic civilization and literatures, designed to give the more advanced students an opportunity to increase the scope of their classroom work.

The Department of German has a chapter of the "Delta Phi Alpha" honorary German fraternity. Outstanding students of German may be invited to be members of the fraternity.

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*On leave of absence 1948-49.

Generally the members of the Delta Phi Alpha Fraternity participate and take the lead in the activities of the Germanic Society but may, if there is sufficient interest and need, manage independently some of the activities of the Germanic Society.

Courses in German

During the academic year 1948-49 the following courses were given: 11, 12, 123, 13, 19, 152.

1. PRIMARILY FOR UNDERGRADUATES

11. Reading Approach to German—For Beginners. Study of vocabulary, pronunciation, elements of grammar, composition, reading of easy prose.

Indivisible course.

Through the year. M. W. F., 8 and 10; Tu. Th. S., 9.

Mr. Bosshard, Mr. Edwards and Mr. Loewy

12. Intermediate German (Second Year). Reading, translation, review of grammar essentials, exercises in composition and pronunciation.

Prerequisite: German 11 or two years of high school German.

Indivisible course.

Through the year. M. W. F., 9; Tu. Th. S., 9.

Mr. Edwards and Mr. Loewy

13. Readings in German Literature (Third Year). Introduces the student to a few of the outstanding works of German literature. Additional readings in the social sciences. Exercises in composition.

Prerequisites: German 12 or its equivalent.

Through the year. Tu. Th. S., 9 and 10.

Mr. Bosshard, Mr. Edwards and Mr. Loewy

123. Conversational German. Practice in speaking and writing German. Recommended for those students who plan to major in German or for non-majors who have a real interest in attaining fluency in the language.

Prerequisite: German 12, or its equivalent.

Through the year. M. W. F., 10. Mr. Loewy

152. LITERATURE: THE AGE OF ENLIGHTENMENT AND THE CLASSICAL PERIOD. Lectures, reading reports.

Prerequisite: German 13 or satisfactory record in an achievement test in reading, writing and the oral use of the language.

Through the year. M. W. F., 9. MR. BOSSHARD

153. LITERATURE: THE NINETEENTH AND THE TWENTIETH CENTURIES. See German 152.

Through the year. M. W. F., 9. MR. BOSSHARD

Omitted, 1948-49. Offered in alternate years.

19. SEMINAR FOR HONORS STUDENTS. Independent reading of literature to supplement the work done in course. Oral and written reports.

M. W. F. 11 and arranged conferences. MR. EDWARDS

COURSES NOT REGULARLY OFFERED

111. SPEAKING APPROACH TO GERMAN. For Beginners.

132. ADVANCED GRAMMAR AND COMPOSITION.

141. GERMANIC CIVILIZATION. An illustrated lecture course on the cultural development of northern Europe from Indo-European times through the Renaissance to the Classical period.

142. GERMAN CLASSICS IN TRANSLATION.

161a. LYRIC POETRY. A survey of German lyric poetry.

162b. GOETHE'S FAUST. Fragment, First and Second Part.

HEALTH EDUCATION FOR UNDERGRADUATE WOMEN

A required course for students in the Women's College, offered each academic year.

Hygiene. A study of the basic principles of physiology and anatomy and the principles of healthful living which will aid the student in developing attitudes and habits necessary for happiness and service in personal, family, and community life.

A non-credit course.

First semester. Th., 12-1. Miss Hughes

DEPARTMENT OF HISTORY AND INTERNATIONAL RELATIONS

Professor Lee, Professor Jordan, Assistant Professor Hayden, Assistant Professor Campbell, Assistant Professor Cohen

UNDERGRADUATE WORK

In its undergraduate program the department offers basic courses in the fields of American, European, and British history, American and European government, and international relations.

History 10, primarily for freshmen, is open to members of all classes, but must be taken as early as possible by majors in the department. Other courses primarily for undergraduates may be elected by non-majors who have not previously taken History 10; and courses for advanced and graduate students may be taken by non-majors with the permission of the instructor if in his judgment the student has an adequate background for the course. Majors will normally take Economics 11 as well as History 10, before the end of the sophomore year. Further elections in this and related departments are determined by the major's special interests, but are expected to include at least two upper class (2) courses in this department. For inter-departmental programs in which this department cooperates, see p. 84-7.

INTERNATIONAL RELATIONS

Attention is called to the inter-departmental major in international relations, described on p. 84. The courses in the field which are offered by this department are listed under both history and government.

GRADUATE WORK

The distinctive feature of the graduate work is the emphasis laid upon individual instruction and guidance by means of informal conferences between instructor and student, small classes, and seminars. The principal fields of graduate study are American history and politics, modern diplomacy, and the international relations of the United States, Europe, the British Empire, and the Far East.

The program for the degree of Master of Arts is worked out individually with each student. All are required to take the departmental seminar (History 30). For general requirements, see the announcement of the Graduate School.

For the doctorate, a candidate must present six fields of study, two of which are normally written off by approved courses or by written examinations, while four are tested in the preliminary oral examination. The doctoral dissertation is written in one of the six fields, designated as the special field. The final doctoral examination covers both the dissertation and the special field.

Reading courses are offered to meet the wants of individual students who need work which is not presented in regularly scheduled courses. Thesis courses provide guidance for those preparing theses or dissertations. These may be semester courses or year courses.

Attention is called to related work offered in the fields of geography and economics from which minor fields for both the master's and the doctor's degrees may be chosen. Note also the announcement of the Division of International Affairs.

COURSES IN HISTORY, GOVERNMENT, AND INTERNATIONAL RELATIONS

During the academic year 1948-49 the following courses were given: History 10, 12, 131a; 205b, 225, 230, 28; the Honors Conference; 30, 314a, 331; Government 15, 24, 241, 25a, 252b; 341, 351.

1. PRIMARILY FOR UNDERGRADUATES

10. EUROPE AND THE UNITED STATES. A survey of European and American history since the Renaissance.

A special fee of $1 is charged for supplies and duplicate library copies of books.

Open to freshmen. See departmental announcement above.

Through the year. Tu. Th. S., 9.

MR. JORDAN, FIRST SEMESTER;
MESSRS. LEE AND CAMPBELL, SECOND SEMESTER.
ASSISTED BY MISS IRWIN AND MR. BRICKLEY

11a. MEDIEVAL EUROPE. An introduction to European civilization from the Roman Empire to the Renaissance.

Half course. First Semester. Tu. Th. S., 10. MR. LEE

To be offered in the Summer Term, 1949, and in 1949-50.

Omitted, 1948-49.

12. HISTORY OF ENGLAND. Dealing primarily with British history since the fifteenth century this course forms a background for the study of American history and English literature.

Through the year. M. W. F., 8. MR. JORDAN

131a. THE UNITED STATES IN THE 19TH CENTURY. A survey which devotes special attention to such factors as nationalism, democracy, and industrialism in the creation of modern America.

Half course. First semester. Tu. Th. S., 9. MR. CAMPBELL

To be offered in the Summer Term, 1949.

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

205a. INTRODUCTION TO POLITICAL PHILOSOPHY. A Study of the main trends of Western political thought with reference to their underlying social, political and economic realities.

Half course. First semester. M. W. F., 9. MR. JORDAN
Omitted, 1948-49. Offered in alternate years.

205b. RECENT POLITICAL THOUGHT. The conflicting ideologies of our time in their development since the French Revolution. Marxism, Fascism, and Nazism will be analyzed with especial reference to their challenge to liberal democracy.

Half course. Second semester. M. W. F., 12. MR. JORDAN

211. EUROPE SINCE 1830. The development of the major European nations with special emphasis on the period from 1870 to the present.

Through the year. Tu. Th. S., 11. MR. LEE
Omitted, 1948-49. Offered in alternate years.

214b. EUROPEAN INTERNATIONAL RELATIONS SINCE 1930. Although the emphasis is placed upon international relations, some attention is paid to internal developments in the more important states in order to make clear the causes and course of the war of 1939-45, and its immediate aftermath.

Half course. Second semester. MR. LEE
Omitted, 1948-49.

22a. TUDOR AND STUART ENGLAND. A survey of the period from 1485 to 1688 with particular attention to the social backgrounds of English literature and to the conditions leading to colonization of America. MR. JORDAN

Half Course.
To be offered in the Summer Term, 1949.
Omitted, 1948-49.

221a. England Since 1760. A general course, stressing the political, economic and social development of the modern commonwealth.

Half course.
To be offered in the Summer Term, 1949. MR. JORDAN
Omitted, 1948-49.

225. HISTORY OF THE BRITISH EMPIRE. In the second semester the course will deal with developments and problems since 1900.
Through the year. M. W. F., 9. MR. JORDAN
To be omitted, 1949-50. Offered in alternate years.

226b. HISTORY OF BRITISH INDIA.
Half course. Second semester. MR. JORDAN
Omitted, 1948-49.

23a. AMERICAN COLONIAL HISTORY TO 1776. This will include the European backgrounds of American history with particular reference to England, and the political, economic, and social development of the colonies.
Half course. First semester. Tu. Th. S., 11. MR. CAMPBELL
Omitted, 1948-49.

230. SOCIAL AND INTELLECTUAL HISTORY OF THE UNITED STATES Beginning with a brief survey of the European background of American ideas and institutions, this course deals with the main currents in American thought and society from colonial times to the present.
Through the year. Tu. Th. S., 10. MR. CAMPBELL
To be omitted, 1949-50. Offered in alternate years.

232a. CONSTITUTIONAL HISTORY OF THE UNITED STATES. Major emphasis is placed on the historical development and the present interpretations of our basic law.
Half course. First semester. Tu. Th. S., 10. MR. CAMPBELL
Omitted in 1948-49.

234b. AMERICAN DIPLOMATIC HISTORY. The history of the foreign relations of the United States from 1783 to the present.
Through the year. M. W. F., 2. MR. HAYDEN
Omitted in 1948-49.
To be offered Summer Term, 1949.

235b. THE UNITED STATES IN THE TWENTIETH CENTURY. A study of the chief influences in American civilization since 1900, with special attention to the emergence of current social and economic problems.
Half course. MR. CAMPBELL
Omitted, 1948-49. To be offered in the Summer Term, 1949.

274b. THE MODERN FAR EAST. The course deals primarily with international relations in the region since 1895.

Half course. MR. HAYDEN

Omitted, 1948-49. To be offered in the Summer Term, 1949.

28. RUSSIA AND THE NEAR EAST. Beginning with the Byzantine empire and the Kievan state, special attention is given to recent times, particularly to the Russian revolution of 1917 and the Soviet regime since that date.

Through the year. Tu. Th. S., 11. MR. LEE

To be omitted, 1949-50. Offered in alternate years.

284. THE EASTERN MEDITERRANEAN AND THE ARAB WORLD. A study of the Near and Middle East as an area of increasing importance in the international relations of the great powers in the nineteenth and twentieth centuries.

Through the year. MR. JORDAN AND MR. LEE

Omitted, 1948-49.

HONORS CONFERENCE. A course for honors candidates, in which emphasis is put upon student reports and discussion.

Through the year. M., 3-5. MR. LEE AND STAFF

3. PRIMARILY FOR GRADUATE STUDENTS

30. DEPARTMENT SEMINAR. Introduction to bibliography and methods of research and discussion of research problems being investigated by graduate students and faculty.

Required of all first-year graduate students in the department.

Half course, through the year. W., 4-6. MR. LEE AND STAFF

314. EUROPEAN INTERNATIONAL RELATIONS SINCE 1870. A study of the diplomatic history of Europe from the Franco-Prussian war to the present time.

Through the year. Th., 2-4. MR. LEE

First half (1870-1918) offered, 1948-49, as 314a.

321a. ENGLAND SINCE 1865. The development of the United Kingdom from the time of its greatest power to its present struggle to maintain a world position.

Half course. First semester. M., 4-6. MR. JORDAN

Omitted, 1948-49. Offered in alternate years.

331. Problems of Democracy in the United States, 1880-1920. An analysis of the fundamental factors making for change in American economic and political thought at the turn of the century is followed by an intensive study of the progressive movement.
Through the year. Tu., 2-4. Mr. Campbell

GRADUATE READING AND THESIS COURSES

31. Reading
301. Thesis.
In the History and International Relations of Europe. Mr. Lee

32. Reading.
320. Thesis.
In the History and International Relations of England and the British Empire. Mr. Jordan

33. Reading.
330. Thesis.
In the History of the United States. Mr. Campbell

GOVERNMENT

1. PRIMARILY FOR UNDERGRADUATES

15. Introduction to Government. After a consideration of the origins and theories of the state, the structure and functions of American government are studied, with some attention to the problems of modern administration.
Through the year. M. W. F., 12. Mr. Cohen

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

24. International Relations. International rivalries in the 20th century examined, with attention to supposed or genuine national interests. Their worldwide nature is emphasized, and the failure of past efforts to establish order analyzed as a basis for estimating the practicality of modern policies and proposals.
Through the year. M. W. F., 11. Mr. Hayden

241. International Law and Organization. A survey of historic doctrines of international law and their application to modern conditions is followed by a study of the various institutions created to handle international economic, social, and political problems, espe-

cially those concerned with the pacific settlement of disputes and the establishment of world order.

Through the year. M. W. F., 2. MR. HAYDEN
To be omitted, 1949-50. Offered in alternate years.

25a. COMPARATIVE GOVERNMENT. The governments and politics of Great Britain and the major European powers.

Half course. First semester. M. W. F., 10. MR. COHEN

251b. AMERICAN POLITICAL PARTIES. A study of the functioning of American party organizations, pressure groups, and the electorate in American politics. Emphasis is placed upon current problems and trends in the field.

Half course. Second semester. M. W. F., 10. MR. COHEN
Omitted, 1948-49. Offered in alternate years.

252b. INTRODUCTION TO PUBLIC ADMINISTRATION. An introductory examination of the role of administration in modern government, including problems of personnel administration, fiscal management, administrative regulation, and government organization.

Half course. Second semester. M. W. F., 10. MR. COHEN
To be omitted, 1949-50. Offered in alternate years.

3. PRIMARILY FOR GRADUATE STUDENTS

341. INTERNATIONAL RELATIONS SEMINAR. A study of contemporary problems by means of student research and reports.

Through the year. Tu., 4. MR. HAYDEN AND MR. GREEN

342a. MODERN IMPERIALISM. An attempt to determine whether certain people must or should rule over others, in the light of past experience and contemporary realities.

Half course. First semester. MR. HAYDEN
Omitted, 1948-49.

351. PROBLEMS IN AMERICAN GOVERNMENT. A study primarily by means of student research and discussion of selected contemporary problems in American government, including the legislative process, public opinion, and political parties.

Through the year. Tu., 2-4. MR. COHEN

GRADUATE READING AND THESIS COURSES

34. Reading.
340. Thesis. } In International Relations. Mr. Hayden

35. Reading.
350. Thesis. } In American and Comparative Government and Politics. Mr. Cohen

DEPARTMENT OF MATHEMATICS

Professor Bumer, Associate Professor Patton, Mr. Stone.

The department of mathematics offers courses leading to an undergraduate major in mathematics, courses necessary for the study of the physical and social sciences and courses for the student who wishes to learn about the fundamental concepts of mathematics primarily for their cultural value.

Courses 11, 12, 13 and 14 form the basis of a major in mathematics and are important for the study of the physical sciences. A major in mathematics normally includes one or two courses in mathematics in addition to the four courses above and two or three courses in an allied field of study such as physics, chemistry, philosophy or a social study. A course in the history of philosophy is strongly recommended to students majoring in mathematics.

DESCRIPTION OF COURSES IN MATHEMATICS

11. Freshman Mathematics. Course 11 has for prerequisites one course in algebra and one course in plane geometry taken in the secondary schools, although at least three courses in secondary school mathematics are advisable for entrance into college courses in mathematics. Careful attention is given to fundamental concepts and to the development of useful techniques. Topics in algebra, trigonometry, analytic geometry and elementary calculus are introduced.

A qualified student may request permission to take an attainment test in the subject matter of Course 11. If he passes such a test he may enter Course 12.

Through the year, M.W.F., 8 and 11; Tu. Th. S., 8, 9 and 10.
Mr. Bumer, Mr. Patton, Mr. Stone

12. Analytic Geometry and Calculus. Course 12 introduces both the differential and the integral calculus and is essential to further work in mathematics as well as to an understanding of many modern reports in the sciences. Topics from analytic geometry are studied as the need for them arises in the development of the calculcus.

Prerequisite: Course 11 or its equivalent.

Through the year, M. W. F., 10 and 11.

Mr. Bumer, Mr. Stone

13. Differential Equations. The course in differential equations involves treatment of ordinary differential equations, with emphasis on the principal types of first and second order equations and linear equations. Applications to geometry, physics, chemistry and mechanics are stressed.

Prerequisite: Course 12.

Through the year, Tu. Th. S., 9. Mr. Bumer

14. Advanced Calculus. In the course in advanced calculus the following topics are among those studied: complex numbers, partial differentiation, infinite series, vector analysis, multiple and line integrals. Emphasis is placed on the uses to which the topics can be put in the sciences and engineering.

Prerequisite: Course 12.

Through the year, Tu. Th. S., 11. To be offered Summer Term 1949, and 1949-50. Mr. Bumer

15a. Theory of Equations. Algebraic equations and their roots are studied in the course in theory of equations. Determinants and matrices are introduced and various methods for computing roots are given. Applications to electrical and mechanical systems are made.

Prerequisite: Course 12.

Half course, first semester, M. W. F., 9. To be offered 1950-51. Omitted, 1948-49, 1949-50.

15b. ADVANCED ANALYTIC GEOMETRY. The course in advanced analytic geometry includes the study of planes and lines, transformation of coordinates and the general equation of the second degree.

Prerequisite: Course 12.

Half course, second semester. M. W. F., 9. To be offered 1950-51. Omitted, 1948-49, 1949-50.

16a. INTRODUCTION TO COMPLEX VARIABLES. The course in complex variables affords an introduction to analytic functions, line integrals, conformal mapping. Considerable attention is given to mathematical rigor and many examples are studied to illustrate applications.

Prerequisite or taken concurrently: Course 14.

Half course, first semester. M. W. F., 12. New course. To be offered 1949-50. Not offered 1950-51. MR. BUMER

16b. ADVANCED DIFFERENTIAL EQUATIONS. Some simple partial differential equations, Fourier Series and boundary value problems, systems of ordinary differential equations are studied.

Prerequisite: Course 13.

Half course, second semester. M. W. F., 12. New course. To be offered 1949-50. Not offered 1950-51. MR. BUMER

COURSES IN PHILOSOPHY

Courses in philosophy are designed to broaden the student's perspective and help him trace the relations among the various fields of knowledge. They are designed primarily for general education and normally students are not accepted as majors in this field of study.

PHILOSOPHY 11a. LOGIC AND SCIENTIFIC METHOD. A study of the principles of valid reasoning and inductive methods. The application of these principles and methods to the problems of the natural and social sciences, and the consideration of the relation between logic and problems of value.

Open to freshmen.

Half course, first semester. Tu. Th. S., 10. MR. BECK

Given as Philosophy 13a in 1948-49.

Philosophy 11b. Problems of Philosophy. A study of the nature and method of philosophy. The application of philosophical method to contemporary personal and social problems. A detailed analysis of some typical problems in the various fields of philosophy.

Open to freshmen.

Half course, second semester. Tu. Th. S., 10. Mr. Beck

Given as Introduction to Philosophy 1948-49.

Philosophy 12. History of Philosophy. A study of the movements of philosophical thought from the early Greeks to the present day and an analysis of the place of philosophy in the development of Western culture.

Not open to freshmen.

Indivisible course.

Three hours, through the year. Tu. Th. S., 9. Mr. Jefferson

Philosophy 13a. Problems of Ethics. A constructive study of important ethical theories. Designed to acquaint the student with the problems and scope of ethics, and to aid him in the formulation of a fruitful ethical hypothesis.

Open to Juniors and Seniors. A new course, 1948-49.

Half course, first semester. Tu. Th. S., 11. Mr. Beck

Philosophy 13b. Social Philosophy. A critical and comprehensive study of the principles underlying social structure and functions. The examination of the goals, purposes, norms, and ideals of social process, and the relation of that process to the individual good.

Open to Juniors and Seniors. A new course, 1948-49.

Half course, second semester. Tu. Th. S., 11. Mr. Beck

Philosophy 14. Contemporary Philosophy. An intensive study of important thinkers representative of modern developments in philosophy, together with emphasis on the historical roots of their thought. Subjects for 1949-50; Kierkegaard, Royce, Whitehead, and Dewey.

Prerequisite: One and one-half courses in philosophy, including Philosophy 12; or permission from the instructor.

Divisible course, through the year. A new course, 1948-49. Tu. Th., 2. Mr. Jefferson and Mr. Beck

DEPARTMENT OF PHYSICS

Professor Roope, Assistant Professor Gunter

UNDERGRADUATE WORK

The department offers fundamental courses required in preparation for the study of chemistry, biology, meteorology and allied sciences, medicine, dentistry, engineering and science teaching, as well as courses leading to professional or graduate work in physics.

The requirement for a major in physics consists of Physics 11, two courses from Physics 15, 16, 17, 18, 124, either Physics 22 or 23, Mathematics 11 and 12, and Chemistry 11. In addition to electives in Physics, Mathematics 13 and Chemistry 19 are desirable. Students preparing for graduate work should also obtain a good reading knowledge of French and German while in college.

Physics 11 is a prerequisite for all other courses in the department. Courses numbered 15 or higher, except 17 and 124, require the use of calculus and should not be elected without consulting the instructor in charge. Courses 15 and 17 each require a limited amount of laboratory work to be done at the discretion of the instructor and at such times as will not interfere with regularly scheduled courses.

GRADUATE WORK

Courses leading to the degree of Doctor of Philosophy and Master of Arts are omitted for the present.

Courses in Physics

During the academic year 1948-49 the following courses were given: 11, 17, 18a, 18b, 124, 22.

During the academic year 1949-50 the following courses will be offered: 11, 15, 16, 17, 23, 24.

PRIMARILY FOR UNDERGRADUATES

11. General Physics. Mechanics, heat, electricity and magnetism, wave motion, sound, and light.

Indivisible course.

Open to freshmen.

Through the year. M. W. F., 10; M. or Tu. or W., 2. Mr. Roope

13. History of Physics. Mr. Roope
Omitted, 1948-49.

15. Heat and Thermodynamics. This course includes a study of thermometry, calorimetry, the thermal properties of matter in the solid, liquid and gaseous states, the laws of thermodynamics, and applications to a wide range of phenomena.
Prerequisites: Physics 11 and Mathematics 12 (may be taken concurrently).
Through the year. M. W. F., 9. Mr. Roope
Omitted, 1948-49.

16. Optics. The first semester is devoted to a study of the principles of geometrical optics and their application to various optical instruments, including ground and aerial cameras. The second semester is devoted to the principles and application of physical optics.
Prerequisites: Physics 11 and Mathematics 12 (may be taken concurrently).
Through the year. Tu. Th. S., 10. Tu. or Th., 2. Mr. Gunter
Omitted, 1948-49.

17. Introduction to Modern Physics. An elementary treatment of physical experiment and theory of the past fifty years including the more recent atomic and nuclear developments.
Through the year. M. W. F., 11. Mr. Roope

18a. Theoretical Spectroscopy. The origin of line and band spectra in both emission and absorption spectrophotometry is treated.
Prerequisites: Physics 11 and Mathematics 12 (may be taken concurrently). Physics 16 and 17 are desirable but not required.
Half course. First semester. Tu. Th. S., 11. Mr. Gunter

18b. Experimental Spectroscopy. The theory and applications of the optical and electrical instruments used in experimental spectroscopy are discussed. The student will become familiar with the use of prism and grating spectrographs, micro-densitometers, interferometers, and their associated photographic and electrical techniques. The principles of spectrochemical analysis are included in this course.

Prerequisities: Physics, 16 or Physics 18a and Mathematics 12 (may be taken concurrently). Physics 17 is desirable but not required.

Half course. Second semester. Tu., 11; Tu. Th., 2. MR. GUNTER

124. FUNDAMENTALS OF ELECTRONICS. This is a first course in electronics designed to give a broad, largely non-mathematical, background for the understanding of electron tubes and their associated circuits. The application of modern electronic devices to the fields of physics, chemistry, biology, meteorology, and navigation is discussed.

Prerequisite: Mathematics 11.

Through the year. Tu. Th. S., 10; Tu. or Th., 2. MR. GUNTER

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

22. THEORETICAL MECHANICS.

Prerequisite: Mathematics 12. Mathematics 13 is desirable but not required.

Through the year. M. W. F., 9. MR. ROOPE

23. ELECTRICITY AND MAGNETISM. The fundamental laws of electric and magnetic circuits and fields are treated. The elements of electromagnetic wave propagation and their application to antenna design are included in this treatment.

Prerequisites: Physics 11 and Mathematics 12. Mathematics 13 is desirable but not required.

Through the year. Tu. Th. S., 9; Tu. or Th., 2. MR. GUNTER
Omitted, 1948-49.

24. ADVANCED ELECTRONICS. This course is a detailed theoretical study of certain electronic phenomena from a mathematical point of view.

Prerequisites: Physics 23 and Mathematics 12. Mathematics 13 is desirable but not required.

Through the year. Tu. Th. S., 11. MR. GUNTER
Omitted, 1948-49.

25. ADVANCED THERMODYNAMICS. MR. ROOPE
Omitted, 1948-49.

DEPARTMENT OF PSYCHOLOGY AND EDUCATION

PSYCHOLOGY

PROFESSOR JONES, *Chairman,* PROFESSOR WERNER, PROFESSOR (Affiliate) WEINREB, ASSOCIATE PROFESSOR ALPER, ASSOCIATE PROFESSOR BELL, ASSOCIATE PROFESSOR (Affiliate) MEYER, ASSOCIATE PROFESSOR (Affiliate) RODNICK, ASSOCIATE PROFESSOR WAPNER, ASSOCIATE PROFESSOR (Affiliate) WYATT, ASSISTANT PROFESSOR GILSON, INSTRUCTOR (Affiliate) PHILLIPS, VISITING LECTURER MAHL.

The psychological laboratories at Clark University were established by G. Stanley Hall immediately after the founding of the University, and constituted one of the first adequately appointed laboratories in this field in America. These laboratories increased rapidly in size and in research possibilities for experimental psychology, and have recently been remodeled in accordance with present needs. From the outset this research emphasis on experimental psychology was supplemented by work in child study, educational psychology, and mental hygiene. The present interests in the department represent a continuation and development of these earlier emphases. Broad integrated training in psychology is stressed, with special concentration being provided in the areas of child and genetic, clinical, educational, and experimental psychology.

UNDERGRADUATE WORK

The undergraduate curriculum is designed to meet the needs of: (1) students majoring in psychology; (2) majors in related fields; (3) students wishing an orientation to the field of psychology for general cultural development.

Psychology 11 is the basic course in the Division of Psychology, and is a prerequisite for all subsequent courses. This course is open to students with sophomore standing or above.

GRADUATE WORK

Work is offered in the department leading to the degrees of Master of Arts and Doctor of Philosophy. In order to be admitted to the department for a higher degree, the applicant must have a bachelor's degree based upon a distinguished college record. Although the department wishes to be liberal in its requirements involving specific courses, the entering student is expected to have a solid foundation in psychology and related fields. Where the department feels that a student lacks the necessary undergraduate preparation, specific courses of study will be prescribed.

THE DEGREE OF MASTER OF ARTS. To qualify for the degree of Master of Arts in psychology the student must demonstrate competence in representative areas of psychology including experimental psychology and statistical method. The customary program is five courses, including experimental psychology, statistics, and three additional courses supplemented by the writing of a thesis in the area of special interest.

THE DEGREE OF DOCTOR OF PHILOSOPHY. Only students who give evidence of high scholastic attainments will be encouraged to proceed to the degree of Doctor of Philosophy. The obtaining of a Master of Arts degree does not automatically admit the student to the doctoral program. The general requirements for the doctor's degree, other than those for specialization in clinical psychology, include the following. The student is required to pass with distinction five courses during the first year of graduate study and a minimum of two courses during the second year of study. At the end of the second year he is required to demonstrate his competence in psychology by passing with distinction preliminary examinations in the field of psychology as a whole and in an area of specialization. At the present time examinations in the general field include history and theory of psychology, experimental psychology, genetic psychology, normal and abnormal personality, general statistics, and tests and measurements. In addition the student is required to demonstrate his ability to conduct independent research as evidenced by the presentation of an acceptable thesis. For formal thesis requirements and language requirements, see the general statement concerning advanced degrees (Pages 52-54, Bulletin). At a final oral examination a student is required to defend his thesis and to show his competence in the general field of psychology and in his special area of concentration.

The Program in Clinical Psychology. The department offers a four-year program in clinical psychology leading to the degree of Doctor of Philosophy both to students in the V. A. Clinical Psychology Training Program and to those not associated with it. For this degree the same standards of proficiency in the general field of psychology as mentioned above apply. In addition the student will be required to demonstrate mastery of the use of clinical techniques. To provide instruction in such techniques the department offers courses in clinical methodology with a wide variety of practical experience in coöperating institutions, clinics, and agencies.

A minimum of one year of internship, or its equivalent, is included in this four-year program. Among the institutions and agencies cooperating in providing practicum and research facilities are: Bedford V. A. Hospital, Boston V. A. Mental Hygiene Clinic, Clark University V. A. Guidance Center, Cushing V. A. Hospital, Family Service Organization of Worcester, Worcester Boys' Club, Worcester Youth Guidance Center, Worcester State Hospital, and certain schools.

During the first two years the student will include in his program courses basic to a thorough understanding of psychology as well as specialized courses in clinical psychology. He will be required to take the regular preliminary examinations; in this case the examination in the area of specialization will be in clinical psychology.

Research for the dissertation should normally be started during the year of internship and be completed during the fourth year at the University.

In light of the costs of supervision and other special services in connection with instruction in the clinical psychology program, the tuition is $500 per academic year in this program.

COURSES IN PSYCHOLOGY

During the academic year 1948-49, the following courses in psychology were given: 11, 170a, 190a, 201b, 202b, 203, 204a, 209, 210a, 212, 214, 300, 301, 302, 305, 313, 314b, 315b, 317, 318, 322, 324, 332, 340 and 350.

1. PRIMARILY FOR UNDERGRADUATES

11. General Psychology. An introduction to the principles of human behavior.

Through the year. Tu. Th. S., 9. Mr. Wapner

170a. Introduction to Child Psychology. An introductory course in child psychology with special emphasis on factors affecting the social development of the young child.

Half course. First semester. M. W. F., 12. Mrs. Alper

190a. Industrial Psychology. The application of psychological techniques to the problems of business and industry.

(For students in Business Administration.)

Half course. First semester. Tu., 3-5, Th., 4-5. Mr. Gilson

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

200. Social Psychology. A survey of current knowledge about the role of the social environment in the determination of individual behavior.

Through the year.

Omitted, 1948-49. To be offered in 1949-50.

201b. Educational Psychology. A study of psychological principles as they bear upon learning and other problems of education.

Half course. Second semester. S., 11-1. Mr. Jones

Psychology 202b. Development of Personality in Childhood and Adolescence. This course will deal with a number of the determinants of personality formation including both constitutional determinants and culturally imposed factors. Current theories of personality development will be surveyed and the application of these theories to the study of personality will be discussed. Much use will be made of case material. Mrs. Alper

Half course. Second semester. M. W. F., 12.

203. Introduction to Clinical and Abnormal Psychology. The first part of the course will be devoted to a study of the development of the normal and abnormal personality and a survey of the

major types of abnormal behavior. The second part will consist of an introduction to the field of clinical psychology.

Prerequisite: Psychology 11.

Through the year. M. W. F., 11. MR. BELL

204a. GUIDANCE IN CHILDHOOD AND ADOLESCENCE. Principles and methods of guidance in elementary and secondary schools.

Half course. First semester. W., 4-6. MR. BELL

209. DEVELOPMENTAL AND CHILD PSYCHOLOGY. A survey of the principles of development and the problems of child psychology.

Prerequisite: Psychology 11 plus one additional semester course in psychology.

Through the year. W. F., 10. Third hour to be arranged for undergraduates. MR. WERNER

210a. PSYCHOLOGICAL APPROACH TO CITIZENSHIP DEVELOPMENT. A survey and evaluation of the experimental evidence in the field of character and citizenship development of children and adolescents.

Half course. First semester. S., 11-1. MR. JONES

212. EXPERIMENTAL PSYCHOLOGY. A general survey of experimental psychology with the aim of acquainting the student with scientific methods and laboratory technique.

Prerequisites: Biology 11, Psychology 11.

Through the year. Lecture: Tu. Th., 11.
Laboratory: Section A: Tu.,1:30-5
Section B: Th., 1:30-5
MR. WAPNER

214. TESTS AND MEASUREMENTS APPLIED TO PSYCHOLOGICAL AND EDUCATIONAL PROBLEMS. A study of the measurement of aptitude, achievement, interest and attitude. Theoretical considerations and practical problems will be included.

Through the year. M., 4-6. MR. JONES

3. PRIMARILY FOR GRADUATE STUDENTS

300. GENETIC PSYCHOLOGY. A seminar on the basic principles of genetic psychology.

Through the year. Th., 9-11. MR. WERNER

301a. METHODOLOGY IN CLINICAL PSYCHOLOGY (1). The theory of and supervised practical work in non-projective techniques of psychological diagnosis.

Psychology 318 should be taken concurrently with this course.

First semester. F., 8-10. MR. PHILLIPS

301b. METHODOLOGY IN CLINICAL PSYCHOLOGY (11). Principles of and practice of casework.

Prerequisite: Psychology 301a.

Second semester. F., 8-10; S., 9-11. MR. BELL

302a. METHODOLOGY IN CLINICAL PSYCHOLOGY (III). The theory of and supervised practice in projective techniques of personality diagnosis.

Prerequisites: Psychology 301a and 301b.

First semester. F., 8-10. MR. BELL

302b. METHODOLOGY IN CLINICAL PSYCHOLOGY (IV.) The theory of and practice in techniques of integrated clinical analysis.

Prerequisite: Psychology 302a.

Second semester. F., 8-10. MR. PHILLIPS

304b. BEHAVIOR PROBLEMS IN SCHOOL CHILDREN. Case study methods applied to the understanding and guidance of problem children. Seminars and clinical demonstrations.

Second semester. W., 4-6; S., 9-11. MR. BELL

305. ADVANCED EXPERIMENTAL PSYCHOLOGY. A study of experimental methodology and techniques. In the first semester attention will be given to problems of perception, and, in the second semester, to memory, concept formation, and reasoning.

Through the year. Lecture: F., 2-4. MR. WERNER

Laboratory: To be arranged MR. WERNER AND MR. WAPNER

313. STATISTICAL METHODS. The purpose of this course will be to give an understanding of and practice in the statistical methods most valuable in psychological research.

Through the year. W., 4-6. MR. JONES

Psychology 314b. Experimental Social Psychology. A laboratory course in which the principles of scientific investigation are applied to problems in social psychology. In addition to performing a number of standard experiments in social psychology students will also do original research. Areas of experimentation will include topics such as suggestion, the measurement of attitudes, group vs. individual thinking, rumor and opinion polling.

Second semester. Th., 1-3. Mrs. Alper

315b. Experimental Methodology and Design. A consideration of general experimental methodology in psychology with special reference to the problems of research planning and experimental design. Various fields will be drawn upon for illustrations.

Second semester. W., 4-6. Mr. Wapner

316. Physiology Applied to Clinical Psychology. Orientation to psychophysiological problems found in a clinical setting. The course includes selected studies from neuroanatomy, clinical neurology, endocrinology, and psychosomatic medicine.

Through the year. F., 10-12. Mr. Weinreb
Omitted, 1948-49. To be offered in 1949-50 and in alternate years.

317. Methods of Psychotherapy. The course includes a study of various methods of psychotherapy and their application to actual cases.

Through the year. F., 10-12. Mr. Weinreb
Offered in 1948-49 and in alternate years.

318. Dynamics of Personality and Abnormal Behavior. Emphasis will be placed on the dynamics common to both normal and abnormal manifestations of personality defenses. The first part of the course will consist of a consideration of normal personality development and personality theory. The latter part will be devoted to a survey of the main types of abnormal behavior, including psychoses, psychoneuroses, psychosomatic disorders, character disorders, hypnosis, and allied phenomena.

Through the year. F., 4-6. Mr. Rodnick

321. Clinical Problems in Child Psychology. Application of developmental concepts and methods in the diagnostic study of the child. Demonstrations and opportunities for observation will be provided at a children's medical center. Admission only on permission of instructor.

Through the year. Tu., 7-9 P.M. Miss Meyer
Omitted, 1948-49. To be offered in 1949-50.

322. Case Studies in Child Psychology.
Through the year. Tu., 7-9 P.M. Miss Meyer
Offered, 1948-49. To be omitted in 1949-50.

323. Current Literature and Case Study in Clinical Psychology. A review in topical sequence of recent articles and books bearing upon the field of clinical psychology. Discussion of diagnostic and therapeutic case material on an advanced level.

Through the year. Th., 7-9 P.M. Mr. Wyatt
Omitted, 1948-49. To be offered in 1949-50. Alternates with course 324.

324. Psychopathology and Culture. Discussion of selected studies dealing with the interrelationship of the pathology of personality with the problems and trends of contemporary culture. Case material will be used for illustration.

Through the year. Th., 7-9 P.M. Mr. Wyatt
Offered in 1948-49. Alternates with course 323.

332. The Learning Process. A survey of theoretical viewpoints and experiments in the field of learning.

Through the year. F., 7-9 P.M. Mr. Mahl

339. History and Theoretical Viewpoints in Psychology. This course provides: (1) an introduction to the logic and methodology of theory construction in the psychological and social sciences, and (2) an analysis of the techniques of theory construction employed in representative systematic formulations of recent and contemporary psychology.

Through the year.
Omitted, 1948-49. To be offered in 1949-50.

340. Departmental Seminar.

The Staff, Graduate Students,
and Visiting Speakers

350. Research in Psychology. Individual direction of students in their research projects.

The Staff of the Department

EDUCATION

Professor Jones, Associate Professor Bell, Assistant Professor Johnson, Assistant Professor Lane, with the cooperation of Assistant Professor Warman, of the School of Geography.

In 1936 the trustees of the university voted the establishment of work in education leading to the degree of Master of Arts in Education. The essence of the plan was that the professional work of prospective high school teachers should be concentrated largely in one year of graduate work following four years of liberal arts education. During this fifth year the Division of Education aims to provide (1) courses in educational psychology, guidance, and allied subjects, (2) added training in subject-matter in the field in which the student is preparing to teach, and (3) apprenticeship teaching under supervision.

It has become increasingly evident that candidates for the bachelor's degree who include a few courses in education in their undergraduate programs are not being adequately prepared to meet the demands for scholarly and professional training required by the better school systems. The fifth year plan is, therefore, recommended to all students who plan to enter the field of teaching at the secondary school level.

UNDERGRADUATE WORK

A limited number of courses will be open to juniors and seniors in the undergraduate division upon the consent of the instructor, but the department recommends that undergraduate students concentrate upon the subject-matter fields in which they desire to teach, reserving for the fifth year the professional work in the theory and practice of education.

In keeping with the general plan to offer in five years a well-rounded program of teacher training with emphasis on the professional aspects of the training in the fifth year, an undergraduate major in education is not offered.

GRADUATE WORK

The requirements for the degree of Master of Arts in Education cannot be adequately stated in terms of courses to be taken, because the evaluation of the work of each student will be made on the basis of achievement rather than on the basis of courses completed. However, the minimum essentials in terms of course requirements are outlined below.

Course requirements. The student is expected to elect one of the following groups of studies as the field in which he wishes to teach:

(a) Mathematics and natural sciences
(b) History, geography, and economics
(c) Ancient and modern foreign languages
(d) English, alone or in combination with some related subject.

Prior to receiving the degree, the candidate must complete not less than five year-courses in one of the above groups, or in a combination of groups approved by the Division of Education. At least one of the five year-courses must be taken as a part of the study in residence for the advanced degree and must be passed with a grade satisfactory for graduate credit. In addition to the above requirement in the subject-matter field, eight semester-courses of graduate work in education will normally be required. The program of courses to meet these requirements must be approved in advance by the department. Changes in the proportion of education and subject-matter courses may be made by the department on the basis of the candidate's previous training. Work, additional to the above requirements, either in the subject-matter field or in education, or both, may be required if this seems necessary for the adequate preparation of the candidate.

Thesis. The candidate must present a thesis, or special report, in which he demonstrates not only his grasp of the subject-matter which he plans to teach but also a mastery of the educational principles necessary for such teaching. The thesis will be adapted to the vocational needs of the candidate and will not be regarded as an index of his capacity for research. In this respect it may differ somewhat from the thesis required of candidates for the degree of Master of Arts in other fields.

Courses in Education

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

201b. Educational Psychology. A study of psychological principles as they bear upon learning and other problems of education.
Half course. Second semester. S., 11-1. Mr. Jones

202a. History of Education. A study of the relationship between society and its educational agencies. One of the main purposes of the course is to help prospective teachers assess the strengths and weaknesses of our educational traditions.
Half course. First semester. M. W. F., 8. Mr. V. B. Johnson

204a. Guidance in Childhood and Adolescence. Principles and methods of guidance in elementary and secondary schools.
Half course. First semester. W., 4-6. Mr. Bell

208a. Principles of Education. A survey of the major objectives of education, the special functions of the secondary school, and the principles which underlie the learning and teaching process.
Half course. First semester. M. W. F., 12. Mr. V. B. Johnson

208b. Methods in Secondary Education. A study of techniques of classroom management, instructional planning, and methods in secondary school work. The personality of the teacher, the physical conditions under which he works, and routine organization are all related and recognized as part of the problem of classroom teaching.
Half course. Second semester. M. W. F., 12. Mr. V. B. Johnson

210a. PSYCHOLOGICAL APPROACH TO CITIZENSHIP DEVELOPMENT. A survey and evaluation of the experimental evidence in the field of character and citizenship development among children and adolescents.

Half course. First semester. S., 11-1. MR. JONES

211. VOCATIONAL GUIDANCE. A survey of the techniques and tools of the vocational counselor, including occupational information, vocational testing, methods of interviewing and counseling, case histories and reports, administration and organization of vocational guidance programs.

Through the year. Th., 4-6. MR. LANE

214. TESTS AND MEASUREMENTS APPLIED TO PSYCHOLOGICAL AND EDUCATIONAL PROBLEMS. A study of the measurement of aptitude, achievement, interest and attitude. Theoretical considerations and practical problems will be included.

Through the year. M., 4-6. MR. JONES

20b. (Same as GEOGRAPHY 20b.) GEOGRAPHY IN EDUCATION. A survey of geography in the present-day American schools. The course is designed to meet the needs of those expecting to teach geography.

Half course. Second semester. M., 4-6. MR. WARMAN

Additional work for undergraduates for an extra hour of credit.

Offered in 1948-49 and in alternate years.

3. PRIMARILY FOR GRADUATE STUDENTS

EDUCATION 304b. BEHAVIOR PROBLEMS IN SCHOOL CHILDREN. Case study methods applied to the understanding and guidance of problem children. Seminars and clinical demonstrations.

Second semester. W., 4-6; S., 9-11. MR. BELL

313. STATISTICAL METHODS. The purpose of this course will be to give an understanding of and practice in the statistical methods most valuable in measurement and research.

Through the year. W., 4-6. MR. JONES

Education 315a. Apprenticeship Teaching. An informal course consisting of extensive practice teaching in the field or fields in which the student plans to teach. Individual supervision is given by the department and by critic teachers in coöperating schools.

Half course. First semester. Time to be arranged.

Mr. Jones and Critic Teachers

DEPARTMENT OF ROMANCE LANGUAGES

Associate Professor Reid, Associate Professor Nicol,
Assistant Professor King, Assistant Professor Ramsey,
Mr. MacQueen

Courses offered in the languages and literatures of France, Spain, and Spanish America have been planned to provide:

1) an adequate foundation for graduate study or teaching either French or Spanish, or both;
2) an extensive reading knowledge of both languages, essential for carrying on advanced study in natural sciences, social sciences, and the humanities, and for fulfilling the language requirement for the degree of Bachelor of Arts;
3) a competent speaking knowledge of both languages.

A major in Romance languages must comprise:

1) Four full courses to be chosen from among the following:
    French 13, 114, 123b, 125, 126
    Spanish 13, 114, 115, 123b
    Romance Languages 124a
2) French 113 or the equivalent.
3) History 10, to be completed by the end of the sophomore year.
4) at least one course, to be approved by the department, in non-Romance literature.

Students majoring in romance languages are expected to acquire a thorough knowledge of either French or Spanish and a competent, knowledge of the other, both in language and in literature.

Students majoring in Group C who have not offered at least two units of Greek or Latin for admission are required to take a year's course in either classical civilization or elementary Greek or Latin. The choice between civilization and language is subject to the approval of the major department. If the language course is elected, this requirement should normally be satisfied during the freshman year. The course satisfying this requirement may, with the approval of the major department, be included in the seven courses constituting the major.

Students desiring a degree with honors in Romance languages should consult with the department for a statement of the required program of studies.

Students intending to major in Romance languages should consult the chairman of the department.

FRENCH

During the academic year 1948-49 the following courses in French were given: 11, 12, 13, 14, 113, 114, 126, and Romance Languages 124a.

1. PRIMARILY FOR UNDERGRADUATES

11. Elementary. For beginners. The elements of grammar and pronunciation; extensive, carefully graded reading; exercises in speaking and writing simple French.

Indivisible course.

Open to freshmen.

Through the year. Tu. Th. S., 11; M. W. F., 9.

Mr. King and Mr. MacQueen

12. Intermediate. Review of grammar, exercises in composition and pronunciation, intensive and extensive reading in a variety of modern texts.

Prerequisite: French 11 or the equivalent, to be determined by a placement test.

Indivisible course.

Open to freshmen.

Through the year. M. W. F., 8 and 10; Tu. Th. S., 9.

Mr. MacQueen and Mr. Ramsey

13. Third-year Oral and Written French. A rapid intensive review of grammar; the elements of phonetics; exercises in composition and pronunciation; conversational practice. Course 13 is conducted largely in French.

Prerequisite: Grade of B– or higher in French 12, or equivalent skill in the language, to be determined by a placement test. Admission is subject to the approval of the instructor.

Open to freshmen.

Through the year. W. F., 12 and M., laboratory 1 to 3.

Mr. Reid

14. Readings in French Literature. The aim of French 14 is two-fold: the attainment of facile reading ability and the appreciation of at least ten works selected from various periods and chosen for their literary excellence and universal appeal.

Prerequisite: French 12 or the equivalent, to be determined by a placement test.

Open to freshmen.

Through the year. M. W. F., 9 and 11. Mr. Nicol

113. Introduction to French Civilization. A selective survey of the history, art, literature and music of France, from the Middle Ages to the present time. Ordinarily it is expected that students will have completed French 14 before taking this course, inasmuch as a reading knowledge of the language is highly desirable.

French 113 may be counted in fulfillment of the general requirement in art, music and literature, but not toward fulfillment of the requirement in foreign language.

Through the year. Tu. Th. S., 11. Some meetings are held in the Worcester Art museum. Mr. Nicol

114. General View of French Literature. A unified and fairly complete survey of French literature from the beginnings to the present time.

Prerequisite: Grade of B– or higher in French 13 or 14 or the equivalent.

Through the year. M. W. F., 10. Mr. King

125. Principal Prose Genres. Detailed study of the novel, the short story and the essay, as exemplified by the chief works in each genre from the Middle Ages to the present. Some attention will also be given to the writers of maxims, memoirs and letters. Conducted in French.

Prerequisite: Grade of B– or higher in French 114 or the equivalent.

Through the year. Tu. Th. S., 9. Mr. Nicol

Omitted in 1948-49. Offered in alternate years.

126. French Poetry and Drama. Intensive study of the principal monuments of each genre, from the Middle Ages to the present. Conducted in French.

Prerequisite: Grade of B– or higher in French 114 or the equivalent.

Through the year. Tu. Th. S., 9. Mr. Nicol

To be omitted, 1949-50. Offered in alternate years.

123b. Advanced Language. Advanced composition and special study of grammatical topics.

Prerequisite: Grade of B– or higher in French 13. Romance Languages 124a is desirable but not required.

Half course. Second semester. Mr. Reid

Omitted, 1948-49. Offered when the demand warrants.

Romance Languages 124a. Comparative French and Spanish Phonetics. The elements of general phonetics. A detailed study of the sounds of French and Spanish. A required course for majors who wish to be recommended for teaching either language.

Prerequisites: Grade of B– or higher in French 13 or Spanish 13.

Half course. First semester. M. W. F., 10. Mr. Reid

To be omitted, 1949-50. Offered in alternate years.

SPANISH

During the academic year 1948-49 the following courses were given: 11, 12, 13, 14, and Romance Languages 124a.

1. PRIMARILY FOR UNDERGRADUATES

11. ELEMENTARY. For beginners. The elements of grammar and pronunciation; extensive, carefully graded reading in both the Spanish and Spanish-American fields. Exercises in speaking and writing.

Indivisible course.

Open to freshmen.

Through the year. M. W. F., 11; Tu. Th. S., 11.

MR. REID

12. INTERMEDIATE. Review of grammar, exercises in composition and pronunciation, intensive and extensive reading of texts dealing with Spain and Spanish America.

Prerequisite: Spanish 11, or the equivalent, to be determined by a placement test.

Indivisible course.

Open to freshmen.

Through the year. Tu. Th. S., 8 and M. W. F., 9.

MR. MACQUEEN AND MR. KING

13. THIRD-YEAR ORAL AND WRITTEN SPANISH. A rapid intensive review of grammar; the elements of phonetics; exercises in composition and pronunciation; conversational practice. Course 13 is conducted largely in Spanish.

Prerequisite: Grade of B– or higher in Spanish 12, or equivalent skill in the language, to be determined by a placement test. Admission is subject to the approval of the instructor.

Open to freshmen.

Through the year. Tu. S., 11 and Th., laboratory 1 to 3

MR. RAMSEY

Offered when the demand warrants.

14. Readings in Spanish and Spanish-American Literature. The aim of Spanish 14 is two-fold: the attainment of facile reading ability and an appreciation of some outstanding examples of Spanish and Spanish-American literature.

Prerequisite: Spanish 12, or the equivalent, to be determined by a placement test.

Open to freshmen.

Through the year. M. W. F., 9; Tu. Th. S., 10. Mr. Ramsey

114. The Literature of Spain. A general view of Spanish literature with emphasis on the study of the origins and development of the novel and drama, culminating in the masterworks of the nineteenth century. Necessary attention will be given to political and cultural background.

Prerequisite: Grade of B– or higher in Spanish 13 or 14 or the equivalent.

Through the year. Mr. Ramsey

Omitted, 1948-49. To be offered in 1949-50.

115. Spanish-American Literature. The principal literary trends in Spanish America from the colonial period to the present day. Special emphasis will be placed on novels and short stories important to the understanding of the nature and problems of life in Latin America.

Prerequisite: Grade of B– or higher in Spanish 13 or 14, or the equivalent.

Through the year.

Omitted, 1948-49. Offered when the demand warrants.

123b. Advanced Language. Advanced composition and special study of grammatical topics.

Prerequisite: Grade of B– or higher in Spanish 13, and preferably Romance Languages 124a.

Half course. Second semester.

Omitted, 1948-49. Offered when the demand warrants.

ROMANCE LANGUAGES 124a. COMPARATIVE FRENCH AND SPANISH PHONETICS. The elements of general phonetics. A detailed study of the sounds of French and Spanish. A required course for majors who wish to be recommended for teaching either language.

Prerequisite: Grade of B– or higher in French 13 or 112, or Spanish 13.

Half course. First semester. M. W. F., 10. MR. REID

To be omitted, 1949-50. Offered in alternate years.

COURSES IN SOCIOLOGY

A description of the offerings in Sociology and a list of courses in Sociology will be found in the announcement of the Department of Economics and Sociology.

COURSES IN SPANISH

A description of the offerings in Spanish and a list of courses in Spanish will be found in the announcement of the Department of Romance Languages.

The Summer Term

First Session, June 6 to July 15

Second Session, July 18 to August 26

A six-week summer school was established in 1921, primarily to serve teachers who were employed during the regular academic year. Its organization and its offerings were relatively independent of the general university program.

The national emergency beginning in 1941 made it necessary to provide opportunities for college students to complete their requirements for a bachelor's degree in as short a time as possible. Accordingly the summer session was lengthened to twelve weeks and made an integral part of the college program. *The twelve-week summer term will be discontinued after 1949.*

Teachers who wish to attend the summer school for six weeks will find many courses suited to their needs during the second session.

Instruction is offered in all subjects usually included in the undergraduate or graduate programs for which there is sufficient demand.

Work done in the summer term may be counted toward the fulfillment of the requirements for the degrees of Bachelor of Arts, Bachelor of Business Administration, Bachelor of Education, Master of Arts, and Doctor of Philosophy. A graduate student should secure explicit approval of his major department for any program undertaken during the summer term.

Unless otherwise announced, subjects are presented in courses or half courses. A course, equivalent to six semester hours, involves five sixty* minute periods per week, or their equivalent, throughout twelve weeks. A half course extends through six weeks. A normal program is two subjects carried concurrently.

Tuition charges, for a normal program, are $152.00 for the term of twelve weeks, or $76.00 for each session of six weeks. The charge for other programs is at the rate of $76† per course, $38 per half course.

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*Seventy-five minutes in the Summer of 1948.

†With the opening of the 1949-1950 academic year Sept. 19, 1949, tuition charges become $80 per course, $40 per half course.

Dormitory accommodations for both men and women are available at reasonable rates.

The first session is designed primarily for college students who will remain through the entire term of twelve weeks. However, any qualified person may be admitted to this session.

The second session has the additional purpose, as has been stated, to serve the group which under normal conditions would attend a summer school for six weeks, beginning about July 4. Many of the undergraduate courses have been planned so that they may be entered at the opening of the second session.

The completion of a high school course or its equivalent is a prerequisite for admission to the summer term.

The Summer Term Bulletin contains descriptions of the various courses to be offered and may be had upon application to THE DEAN OF THE COLLEGE, CLARK UNIVERSITY, WORCESTER 3, MASSACHUSETTS.

COURSES OFFERED IN THE SUMMER TERM

Courses are identified by number. The letters "a" and "b" following a course number indicate that the course is offered for the first session or for the second session respectively. Any particular course bears the same identifying number whether it is offered during the regular academic year or in the summer term. Courses primarily for undergraduates have numbers beginning with the figure "1," those for advanced undergraduates and graduate students, with the figure "2," and those primarily for graduate students, with the figure "3."

The following courses were given during the 1948 summer term.

BIOLOGY

ST11.	General Biology.	MR. NUNNEMACHER AND MR. POTTER
ST16a.	Histology.	MR. NUNNEMACHER
ST18b.	Genetics.	MR. POTTER

BUSINESS ADMINISTRATION

ST17.	Public Speaking.	Mr. Illingworth
ST18.	Business Organization and Finance.	Mr. Lucas
ST127.	Intermediate Accounting.	Mr. Hargest
ST181a.	Industrial Management.	Mr. Hargest
ST182b.	Office Management.	Mr. Hargest

CHEMISTRY

ST12a.	Qualitative Analysis.	Mr. Martin
ST14b.	Quantitative Analysis.	Mr. Martin
ST15.	Elementary Organic Chemistry.	Mr. Martin

ECONOMICS

ST11.	Principles of Economics.	Mr. Hall
ST22.	Labor Problems.	Mr. Hall
ST26.	Government and Industry.	Mr. Lucas

EDUCATION

ST201b.	Educational Psychology.	Mr. Jones
ST205b.	The Teaching of English in the High School.	Mr. Parker
ST210b.	Education for Citizenship.	Mr. Jones

ENGLISH

ST12.	Public Speaking.	Mr. Illingworth
ST13b.	Shakespeare.	Mr. Anderson
ST16a.	Advanced Composition.	Mr. Moore
ST111b.	A Survey of American Literature.	Mr. Anderson
ST117a.	Romantic Poetry.	Mr. Moore

FRENCH

ST12.	Intermediate French.	Mr. King and Mr. Nicol
ST14.	Readings in French Literature.	Mr. King and Mr. Nicol

GEOGRAPHY

ST16.	Economic Geography.	Mr. Warman and Mr. Murphy
ST183a.	Geography of South America.	Mr. Warman
ST191.	Cartography.	Mr. Burnham
ST28b.	Geography of New England.	Mr. Ekblaw
ST201b.	Political Geography.	Mr. Van Valkenburg
ST287b.	Geography of the Pacific Area.	Mr. Murphy

GERMAN

ST12.	Intermediate German.	Mr. Palmer and Mr. Edwards
ST13.	Readings in German Literature.	Mr. Palmer and Mr. Edwards

HISTORY AND INTERNATIONAL RELATIONS

ST12b.	American Government.	Mr. Hayden
ST15a.	History of England since 1689.	Mr. Jordan
ST22b.	The Modern Far East.	Mr. Hayden
ST233b.	European International Relations Since 1930.	Mr. Lee
ST234a.	American Colonial History to 1776.	Mr. Campbell
ST238.	The Eastern Mediterranean and the Arab World.	Mr. Jordan and Mr. Lee
ST242a.	The United States in the Twentieth Century.	Mr. Campbell

MATHEMATICS

ST12.	Analytical Geometry and Introduction to Calculus.	Mr. Melville
ST13.	Calculus and Differential Equations.	Mr. Melville

PSYCHOLOGY AND EDUCATION

ST11.	General Psychology.	Mr. Bell and Mr. Weiner
ST207.	Psychology of Personality.	Mr. Bell and Mr. Garmezy

SOCIOLOGY

ST11.	Principles of Sociology.	Mr. Killian
ST21a.	The Family and Society.	Mr. Killian
ST22b.	Race and Nationality.	Mr. Killian

SPANISH

ST12.	Intermediate Spanish.	Mr. Reid and Mr. MacQueen
ST14.	Readings in Spanish and Spanish-American Literature.	Mr. Reid and Mr. MacQueen

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The Degree of Bachelor of Education

The Degree of Bachelor of Education has been offered primarily to teachers in the Worcester school system and to those in nearby towns since 1923. A condition for admission to candidacy for the degree is completion of a two-year normal school course, or its equivalent. A year of professional, full-time teaching experience is a prerequisite for the degree.

Since the State Teachers College of Worcester began granting a bachelor's degree the reasons for offering such a degree have largely ceased to exist, and there has been a material shrinkage in the number of candidates.

At present new candidates may be accepted, if at all, only after special action.

Degrees Conferred

IN THE CALENDAR YEAR 1948

BACHELOR OF ARTS

Nello Alfred Allegrezza
Reginald Amback, Jr.
Robert Irving Anderson
Bernard Arnold
Norman Bennett Asher
Malcolm Everett Baird
  (With High Honor in General Course)
Walter Joseph Basiul
Paul Victor Beck
Earl Melvin Belles
Herbert Helmer Benson
Albert John Bernatowicz
  (With Highest Honor in General Course)
Paul Bogosian
David Richard Bortman
Barbara Ellen Brodsky
Harriet Brooks
Richard Carson Brown
Joseph Burack
Ruth Alden Butterfield
Shirley Mary Caisse
Joseph Holligan Callender
  (With Honors in Economics and Sociology)
Robert Lopes Cardozo
Eugene Francis Carraher
  (With Honor in General Course and with Honors in History and International Relations)
Vincent George Carvalho
William Glenn Carruth
Arnold Edward Chandler
Kenneth Ashton Chandler
Ashur George Chavoor
Ruth Ann Chupis
Marvin Babbitt Clapkin
Walter Calvin Conover
Ralph Elliott Cook
  (With High Honor in General Course)
Herbert William Cramer
Vera Rose Crane
Arthur Dagirmanjian
Virginia Wyman Dand
  (With Honor in General Course and with Honors in Romance Languages)
Richard Lorey Day
  (With Honors in Geography)
Georgianna Assunta DeLollis
John Edward Denardo
Robert Frederick Derosier
Lincoln Allen Divoll
Carolyn Merriam Doolittle
Henry Martin Doyle
Daniel Martin Dworkin
Harold Eckman
James Nicholas Eliopulos
Alfred Simon Erlich
Michael Anthony Errede
Evelyn Farmer
Forest Thomas Farnum
Martin Benjamin Finks
Richard David Gale
Sylvia Miriam Globus
  (With Honors in German)
Grant Harry Gray
Julius Sydney Greenstein
Margaret Monica Griffin
Lee Gurel
Gladys Elizabeth Hague
  (With Honor in General Course and with Honors in Psychology)
Henry James Halko
  (With High Honor in General Course and with Honors in History and International Relations)
John Joseph Hallahan
Mary Haroian
  (With Honors in Psychology)
Joseph Edmond Harris
Nathan Benjamin Harrison
Howard Owen Holland
Harry Hoogasian
Irving Hurwitz
  (With High Honor in General Course)
Julio Irizarry
Zaven Jardarian
Doris Elisabeth Johanson
Arthur Russell Johnson
Sonya Alice Johnson
Sumner Mark Joress
Joseph Walter Kern
Charles Klamkin
Leighton Alvin Kneller
Roy Irving Knox
  (With Honors in Economics and Sociology)

Emily Elizabeth Kokocinski
(With Honors in Economics and Sociology)
Wallace Samuel Kreisman
Lois Walbridge Kunzelman
(With Honor in General Course)
Mary Cyriakula Laggis
Richard Bennett Lavine
Edward Emile LeClair, Jr.
(With Honor in General Course and with Honors in Economics and Sociology)
Harold Edmond Lurier
(With Honors in History and International Relations)
Robert William Macdonald
(With Honor in General Course)
Roger Philip Magnusson
Donald Malick
Arleen Marie Manning
William Butler Martin, Jr.
Donald Paul Martineau
Edward Mason
Ina Cohen Mason
(With Honor in General Course)
Bernard Mazur
(With Honor in General Course)
Margaret Ann McCarty
Ralph Elmer Modlinger
Richard Woodbridge Moriarty
(With Honor in General Course)
Beverly Morton
(With Honor in General Course)
Eleanor Jean Murphy
Jacob Nanigian
Hersey Bradford Nelson
Shirley Louise Nickerson
Margaret Mary Noe
(With Honors in German)
Anne Elizabeth Nolan
Paul Henry Olund
Kenneth Marceline Osborne
Sempad Arthur Pachanian
Sidney Nathan Paly
(With Honor in General Course)
David Anshelm Peterson
Carmen Santa Pizzuto
Clifford Hector Pontbriand
Julius Praglin
Emmons Waldo Putnam, Jr.
Philip Joseph Quaiel, Jr.
Joseph Alfred Raboin
(With Honor in General Course)
Virginia Christina Rackliff
Robert Charles Richard
Louis Paul Rinkus
Burton Aldrich Robie
Thelma Rosenlof
Marcia Mae Rosenstein
Theodore John Ross
Ruth Elliott Rowley
Thera Cecile Ruderman
Ivers Sidney Sawyer
Robert William Shaub
David Shepro
David Benedict Sher
Charles Harold Shooshan, Jr.
Bernard Herman Shulman
Franklin Ira Silverman
Doris Gustava Sistrand
(With Honor in General Course)
George Herbert Smith, Jr.
Alphonse Charles Sootkoos
Leo Peter Spagnolo
Marian Allyene Spungin
William Edward Stone
Richard Waltner Swenson
(With High Honor in General Course)
Carlo Armand Tagliavini
Lewis Charles Tatham
Jean Cashman Tucker
Francis Paul Ursoleo
James Elmon Vance, Jr.
Seymour Weinstein
(With Honors in Economics and Sociology)
Frances Lucas Weisse
Malcolm Williams
Martin Charles Wilson
D Albert Young
Edward Francis Yurkiewicz
Nathan Zebrak
Mary Ziu

BACHELOR OF BUSINESS ADMINISTRATION

John Russell Ahlstrom
Reginald Amback, Jr.
Donald Fernland Anderson
Clifford Brodeur Bachand
William Glenn Carruth
Howard Irving Dickinson
(With Highest Honor in General Course and with Honors in Business Administration)
Harry Joseph Donohue
(With Honor in General Course)

Earl Edmund Dowd
Thurston Harold Graden
Howard Axel Gullbrand
Arthur Richard Hansen
Shirley Barbara Howard
June Pearl Joyce
Martin Katte, Jr.
George Robert Latham
Thomas Joseph Lynch
Wentworth Charter Maynard, Jr.
John James Melia
Nancy Morse
Stanley George Quackenbush
Donald Edward Sabolinski
John Cushman Sanderson
Chester Frederick Svenson
Henry Anderson Thurlow
Haig Robert Tufenkjian
Carl Donald Valiton
Milton Weinstein
Jack Leonard Wolfson
(With Honors in Business Administration)
Thomas Joseph Yacuzzi
Walter Henry Zukowski
(With High Honor in General Course)

BACHELOR OF EDUCATION

Robert Spencer Danstedt
Gertrude Louise Goodlight
V. Theresa Kuivila

MASTER OF ARTS

Sherman Raymond Abrahamson
Lewis McElwain Alexander
George William Anderson
William Gardner Blount
David Bonfield
William Richard Brotherton
Beatrice Lillian Burke
Stanley Chaberek, Jr.
Genevieve Clark
John Bowne Colton, Jr.
John Henry Dean
Ernest Sanford Dix
Edward Orr Elsasser
Henry Hermon Esterly
Sonja Gerda Feingold
Jean Thelma Fishkin
Lea Theresa Hearn
Mohamed Bahy El-Din El-Hefny
Clarke Freas Hess
John Edward Laffey
Arthur Dennis Lane, Jr.
Bernard James LaPlante
Hazel Marion Latendress
David Richards Lennan
Theodore John Liard, Jr.
Kenneth Cauldwell MacArthur
Otto Russell Mauke
Natalie Eva Nason
Paul Daniel O'Donnell
Donald Walter Osten
Marguerite Pauline Plante
Gordon Keith Prouty
Byron Woodall Riggan
Bernice Marion Rosen
Clark William Simmons
Vera Alice Simpkins
Clinton Lee Warne

MASTER OF ARTS IN EDUCATION

Florence Arvidson Abbot
Dorothy Harriet Aldridge
Jean Ethel Crotty
Stephen Del Rosso
Jacob Franklin
Ella Washington Griffin
Robert Vincent McCarthy
Ruth Phyllis Meyer
Dominic John Monfredo

DOCTOR OF PHILOSOPHY

Sung-Chiao Chao
George Francis Deasy
Henry William Dion
Carl Frederick Frost
Huey Louis Kostanick
Merle Wentworth Myers
Ralph Thomas Nazzaro
Gordon B. Schilz
David Clinton Winslow

HONORARY DEGREES

Clarence Saunders Brigham	Doctor of Letters
Carroll Cornelius Pratt	Doctor of Science
Robert Luther Sibley	Doctor of Science
Christian Archibald Herter	Doctor of Laws

SUMMARY

Degrees in Course		*Honorary Degrees*	
Bachelor of Arts	148	Doctor of Laws	1
Bachelor of Business Administration	30	Doctor of Letters	1
Bachelor of Education	3	Doctor of Science	2
Master of Arts	37		
Master of Arts in Education	9		
Doctor of Philosophy	9		

Register

Names of students are grouped in three lists. I, graduate students, undergraduate students, and special students in attendance during the regular academic year 1948-49; II, those who attended the 1948 Summer Term; III, students who withdrew after a short time in residence, 1948-49.

I. GRADUATE STUDENTS, COLLEGE STUDENTS AND SPECIAL STUDENTS IN ATTENDANCE DURING THE REGULAR ACADEMIC YEAR

Explanation: S—scholar; F—fellow; TF—teaching fellow; numerals 49, 50, 51, and 52, are used to classify undergraduates; g—students formally admitted to the graduate division; s—special students; BE—candidate for the degree of Bachelor of Education; Aud—Auditor only. B—biology; BA—business administration; Ch—chemistry; CL—classical languages; Ec—economics and sociology; Ed—education; En—English; FA—fine arts; Ger—german; G—geography; H—history and international relations; M—mathematics; Ph—physics; Ps—psychology; RL—romance languages.

State omitted—Massachusetts; town omitted—Worcester; street names refer to streets unless otherwise indicated.

The list includes the names of all who have matriculated and registered. An asterisk (*) indicates a student not in residence for the entire year. A dagger (†) indicates a student entering at the beginning of the second semester.

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Abbas, Naji Mulla	G g	Baghdad, Iraq	25 Freeland
Abeles, Robert Arent	49		21 Havelock
†Abbott, Carroll Marden	H g		36 Rollinson Rd.
Ackerman, Jerrold Leonard	52	Waterbury, Conn.	Estabrook Hall
Adams, Elaine Frances	51	Lowell	Woodland Hall
Adams, Theodore Francis	51		28 Suffield
Addington, Lloyd Byron, Jr.	49	Memphis, Tenn.	20 Gates
Adler, Carleton David	52	Lexington	Estabrook Hall
Adrian, Richard Francis	49; Ed g	Westboro	
Agulnick, Sidney	49		20 Granite
Ahlquist, Stanley Winston	51		38 Parkton Ave.
Ahmadjian, Vernon	52	Whitinsville	Estabrook Hall
Albert, Leon M.	52		395 Lovell
Aldrich, Charles Raymond	50		10 Bluebell Rd.
Alexander, Lewis McElwain	G g	East Dennis	
Allabashi, John Christo	52	Southbridge	Estabrook Hall
Allstrom, Barbara Marianne	52	Auburn	
Allstrom, May Ingrid	50	Auburn	
Altobelli, Richard Joseph	49	Leominster	52 Ripley
Ambrosini, Dario Mario	50	Scranton, Pa.	4 Woodbine
Amidon, Dorothy Alice	Ed g		18 Sunnyhill Dr.
Amsden, Carol Theresa	50		159 Highland
Amsden, Virginia Rita	50		159 Highland
Anderson, Charles Oscar, Jr.	50	Holden	
Anderson, George William	Ed g	Northboro	
Anderson, Janet Marie	50	Richmond, Va.	Blakeslee Hall
Anderson, Jean Harriet	50		43 Tower
Anderson, John Henry	49	Shrewsbury	
Anderson, Roger Burnett	51		11 Prospect
Andreson, Nicholas Ernest	51		712 Pleasant
Antzes, Barbara Irene	49	New London, Conn.	Fanning Hall
Aramony, William	49		509 Grafton
Archambault, John Joseph	49	San Francisco, Calif.	4 Woodbine
Ardehali, Ali	Ec g	Teheran, Iran	61 Charlotte
Armenti, Ralph Angelo	49		277 Shrewsbury
Aronson, Marietta	51	Westboro	
Ash, Margaret Mary	50		365 Cambridge
Asher, Margery Jane	50		99 Coolidge
Askling, Paul Herbert	51	Leicester	
Atrushi, Siddik Abdul Rahman	G g	Dehawk, Iraq	41 King
Atwood, Ruth Joy	49	Spencer	
Audette, Doris Gertrude	49		43 Charlotte
Austin, Richard Marsh	52	Dudley	Estabrook Hall
Babigian, Vasgen	51		35 June
Babineau, Alexis Adrian	Ch g		Assumption College
Bachelder, Beatrice Ann	51		16 Oliver
Bachmann, Robert Edward	52	East Brookfield	

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Bagni, Stuart Read	51	Haverhill	24 Franconia
Bailey, Hildreth Caldwell	52	White Plains, N. Y.	Estabrook Hall
Baird, Malcolm Everett	Ed g	Westboro	
Baker, Elliot	52	Lynn	Estabrook Hall
Baker, Robert William	Ps g	Brookline	10 Lowell
Baker, Stephen Hopkins	49		5 Vincent Ave.
Ball, Millicent Elaine	52		4 Nottingham
Ballan, Emil	49		32 Norfolk
Banks, Donald Alexander	51		56 Fairfax
Barber, Edward Irving	52	New Hartford, N. Y.	Estabrook Hall
Barnard, David Ware	52, Ec s		53 Elm
Barnes, Clarence Edward	52	Auburn	
Barnett, Eileen	50		9 Somerset
Barnicle, Robert Joseph	51	Fairhaven	9 Stoneland
Barrett, James Joseph, Jr.	49		5 Lucian
*Barsoum, Peter, Jr.	49		38 Somerset
Bartuska, Dolores Ann	51	Nanticoke, Pa.	Fanning Hall
Basiul, Walter Joseph	Ps g		56 Perry Ave.
Baskin, Adelbert Fuller	51	Kenmore, N. Y.	20 Ripley
Baskin, Myron Adelbert	H g	Kenmore, N. Y.	20 Ripley
Bastille, Anne Geraldine	51		211 June
Bastille, John George	51		165 Highland
Baum, Bernard	Ch g	Brookline	53 Charlotte
Baumgartner, Franklin Wellington	52	Leominster	
Baxter, Lauren Earl	49	Sloansville, N. Y.	35 Maywood
Beaton, Thomas William	FA s	Rye, N. Y.	74 Elm
Beaudry, René P.	49		25 Collins
Belair, Donald Paul	CL s		305 Belmont
Belden, Robert Dorr	51	Petersham	
Beloff, Marvin Walter	50	Meriden, Conn.	28 Franconia
Berg, Burton Franklin	51		10 Tahanto
Berg, George Milton	50		7 Mattson Ave.
Bergstrom, Evelyn Mae	51	Millbury	
Berkeley, Austin West	Ps g		38 Dustin
Berman, Mildred	G g	Chelsea	3 Shirley
Bernklow, Rodger Douglas	49	Thompson, Conn.	
Bernstein, Frances Gertrude	s		28 William
Bernstein, William Elliott	52		83-12 Park
Berthiaume, Joseph Oner	51	Southbridge	
Berthiaume, Raymond Ovila	51		19 Grand
Biancheria, Amilcare	52		16 Prentice
Bibeau, Robert Wesley	49		49 Pilgrim Ave.
Bird, Frankie Lee	52	Grover, N. C.	37 Eunice Ave.
Birnbaum, Syma	49	Dorchester	Fanning Hall
Blackman, Mildred	52		2 Assumption Ave.
Blackwell, Amelia Alvord	Ps F	Bridgeport, Conn.	871 Main
Blais, Frederick William	51	Colebrook, N. H.	40 Richards
Blue, James Leonard	51	Harvard	4 Pelham
Blume, Geraldine Irma	49	Derby, Conn.	Woodland Hall
†Blumenthal, Robert Warren	Ed s		39 Creswell Rd.
Boch, Oliver Wendell	49	Patchogue, N. Y.	1 Circuit
Booth, Mitchell Burton	49	Brooklyn, N. Y.	33 May
Borkowski, Theresa Rose	52	Gardner	Woodland Hall
†Bornstein, Edith	Ed g	Pittsfield	Brookfield
Bosworth, Russell Henry	H g	Braintree	Greene's Trailer Pk.
Boucher, Donald Edward	52	Millbury	
Boudreau, Florence Agnes	49		71 Gates
Bourque, Ellsworth Joseph	Ps g	Princeton	
Bouve, Ruth Cabot	51		14 Richmond Ave.
Bowler, Donald Joseph	52		11 Jaques Ave.
*Bowker, Glenis	50	Shrewsbury	695 Main
Boxshus, John Peter	49		10 Ellsworth
Boyce, Betty Lou	52	Diamond Point, N. Y.	Fanning Hall
Boyden, Helen Rose	51		81 Downing
Boynton, Stanley Melvin	49	West Boylston	
Branagan, Francis Carr	52		150 Mayfield
Brennan, Dorothy Ann	52		82 Birch
Brick, Harold Raymond	52		224½ Chandler
Brickley, Charles Newton	H TF	East Providence, R. I.	11 Thayer Court
Brigham, Donald Logan	49	Millbury	
Brodeur, Richard Romeo	50	Putnam, Conn.	39 Shirley
Brooks, Marvin Sidney	52		78 May

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Brown, Bernice Eululoo	51	Grafton	Fanning Hall
Brown, Richard Carson	Ch g		7 Marcy
Brown, William Joseph	50	Shrewsbury	
Brunet, Michel	H g	Montreal, Canada	51 Gates
Bruno, Arthur John	Ch g	East Douglas	
Bryant, Marilyn Louise	52		1 MacClary Way
Bubar, Patricia Virginia	49	Holden	
Buchyn, Joseph John	51		6 Gold
Buckley, James Thomas	51		122 Woodland
*Buckman, Bowen, Jr.	50	Weymouth	Leicester Jr. College
Bugbee, Betty Elaine	49	Oxford	
Bumer, John Quinette	52		121 Richmond Ave.
Bumer, Richard Fuller	52		121 Richmond Ave.
Burke, Charles Stephen	50	Marlboro	
Burman, Savitri	G F	New Delhi, India	10 Chatham
Burstein, Symme Hilda	50		4 Intervale
Burton, Dorothea Edythe	G g	Buffalo, N. Y.	24 Gates
Butenas, Carl	49		325 Greenwood
Butler, Mary Alice	52	Bolton	
†Butler, Mary Elizabeth	51	Oxford	
Butler, Orton Carmichael	G g	Millersburg, Ohio	30 Hollywood
Butler, Robert Kenneth	H g		12 Barnard
Butler, Theresa Imelda	49		81 Kenwood Ave.
Butler, Walter Hillman	H g	Rockland, Me.	53 Charlotte
Buzzard, Henry Lewis	G g	Charleston, Ill.	53 Charlotte
Byron, Russell Erwin	50	Oakfield, Me.	823 Main
Caefer, Raymond John	50		7 Cutler
*Cahill, Thomas Michael	52	Madison, N. J.	Estabrook Hall
Cain, Richard Austin	52	Marlboro	
Callan, Barbara	49		67 Fairfax
Camp, Edward Cuthbert, Jr.	49		2 Claremont Sq.
Canty, Cyril Paul	52	Webster	
Capen, William Melvin	50		110 June
Carey, Margaret Jean	52		55 Brantwood Rd.
†Carey, Edward Nicholas	50	Milford	
*Carey, Robert Harrison	49		495 Mill
Carey, Robert Vincent	52	Millbury	
Carini, Louis Peter	49	Framingham	
Carlisle, Robert Bruce	50		28 Irving
Carlon, Kenneth Gustaf	52		1 Willvail
Carlson, Arnold Renaldo, Jr.	52		138 Barnard
Carlson, Martha Jane	50		23 Suburban Rd.
*Carlson, Ruth Eleanor	49		19 Adelle Cir.
Carlson, Torsten Allen	50		5 Marconi Rd.
Carney, Francis Leslie	52		15 Lund
Caron, Blanche Ellen	50	E. Millbury	
Carswell, Catherine Ann	49	Glens Falls, N. Y.	Fanning Hall
Caruso, Mary Leonard	G g	Burlington, N. J.	24 Gates
Cassidy, Clare Therese	Ed g	Uxbridge	
Cassidy, Joseph Gerard	B g	Uxbridge	
Castriotta, Raymond Joseph	51	Leominster	16 Marble
Castro, Carlos Manuel de	51	New York, N. Y.	Estabrook Hall
Ceccorulli, Alton Lebro	51	Branford, Conn.	100 Woodland
Cederlund, Albert Merrill	52		16 Steele
Chaberek, Stanley, Jr.	Ch g	New Bedford	9 Hawthorne
Champeau, Harold Charles	49	Quincy	14 Oberlin
Chandler, Kenneth Ashton	Ps g	Sterling Jct.	
Chang, Ching Chieh	G S	Chia-Hsien, Honan, China	128 Beaverbrook Pky.
Charamella, John Laurence	51		58 Cutler
Charette, Paul Lewis	52		18 Goddard
Chase, Arnold David	49		15 Somerset
*Chase, Lester Jay	RL s		11 Fenwick
Chen, Philip Stanley, Jr.	51	South Lancaster	
Chesson, Harold Ray, Jr.	50	West Brookfield	
Chin, Philip Shen Tung	50		106 Mechanic
*Chiriaco, Charles Larzo	Ch s		86 May
Choiniere, Jacqueline Marie	50	Webster	Fanning Hall
Christie, Janette	49		3 Perrot
Ciani, Libro	49		31 Granby
Ciborowski, Henry Joseph	51		135 Millbury

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Cipriani, Francis Paul	52	Clinton	Estabrook Hall
Clark, Howard Leslie	50	Calgary, Alberta, Can.	30 Hollywood
Clement, Stanley Francis	50	West Roxbury	921 Main
Cocchiola, Jerry Joseph	50	Clinton	
Cochran, Richard Dean	52		955 Pleasant
Cohen, Lois Ruth	51		39 Woodford
†Colgate, Rosemary Hall	FA s		79 West
Collette, Corinne Marie	52	Leominster	Woodland Hall
Collier, Christopher	51	Westport, Conn.	Estabrook Hall
Collins, Mildred Edith	Ed g		18 Walnut
Collins, Philip Joseph	52	Pittsfield	Estabrook Hall
Comalli, Peter Elia, Jr.	49	Lee	53 Maywood
Connolly, Paul Joseph	Ed g		67 Eastern Ave.
Conway, Edward Hartnett	51	Bronxville, N. Y.	100 Woodland
Cook, Ellsworth Barrett	Ps g	New London, Conn.	
Cook, Mary Elaine	50	Uxbridge	34 W. Main, Millbury
Cooke, Milton James	52	West Boylston	
Cooper, Ralph Christian, Jr.	51		22 Minthorne
Cormier, Carlton Foch	Ed g	Marlboro	
Cormier, George Edward	52	West Upton	
Costello, Eleanor Anne	49	Lawrence	Blakeslee Hall
Costrell, Edwin Stanley	H g	Detroit, Michigan	7 Kilby
Coupe, George Alfred	51		7 Freeland Terr.
*Cournoyer, Paul Romeo	49	Spencer	
Courtney, Marie Frances	50		42 No. Parkway
Courtney, Richard John	52		102 Heywood
Coyle, Jack Burton	49	Jersey City, N. J.	35 Maywood
Coyle, Thomas Harrison	49	Jersey City, N. J.	35 Maywood
Crain, Loren Orville	Ps g	Oakdale	
Crane, Charles Bradford, Jr.	52		54 Delawanda Dr.
Crickard, George Edgar, Jr.	49	Shrewsbury	
Crockett, Harold Ernest	49		28 Irving
Croman, Earl Leonard	50	Clinton	36 Richards
Cronin, James Francis, Jr.	49		3 Greenleaf Terr.
Cross, Olive L.	49	Holden	
Crowley, John Joseph	51		59 Downing
Csizmesia, Frederick William	G g	Providence, R. I.	Col. Pk., Webster
Cuccaro, Ernest Oriente	50		4 Alvarado Ave.
Curran, Robert Joseph	Ps g	Fort-Devens	
Dagirmanjian, Rose	52	Whitinsville	
Daley, Mary Agnes	Ed g		21 Barnes Ave.
Daly, Charles Francis	Ed g		486 Park Ave.
Daniels, Richard C.	49	Cherry Valley	
Danklefsen, Mildred Marie	G F	Bellevue, Ohio	455 Park Ave.
Darrell, Evelyn Katherine	FA s		80 Fairhaven Rd.
Daviau, Donald George	51		21 Hancock
Davidian, David Bagdasar	49		72 Hamilton
Davidson, Chester Joseph	51		10 Sturgis
Davidson, Louie	51	Dorchester	
Davis, Allan Satterthwaite	51	Merion Sta., Pa.	16 Marble
Davis, Carl James, Jr.	50	Watertown	
Davis, Groves Bradford	52		5 Jenkins
Davis, George Herbert, Jr.	50	Auburndale	921 Main
Davis, James Kotsilibas	51		87 Commodore Rd.
Davis, Richard DeForest	50	Mt. Rainier, Md.	923 Main
Day, Jeanne Phyllis	50		731 Pleasant
Day, Richard Lorey	G S	Kittery Point, Me.	18 Shepard
Dean, Robert J.	49	Binghamton, N. Y.	16 Marble
Deane, Mary Louise	50	Whitinsville	Blakeslee Hall
Dear, Walter Ching	50		209 Lincoln
Degermajian, George	51		1 Patch
DeGuise, Eleanor Anne	52	Dracut	Fanning Hall
Delehanty, Edward John	51	Wallingford, Conn.	59 Maywood
Delle, George Victor	52		14 Pelham
Derby, Doris Adeline	H S	Detroit, Mich.	25 Woodman Rd.
Derosier, Robert Frederick	Ed g	Leominster	
Desroches, Edward Joseph	49	Southbridge	
DeVries, Faith Marie	51	West Upton	
Dik, Robert Edward	50	Townsend	65 Rockland, Auburn
Dinerstein, Jenny	50	Colchester, Conn.	871 Main
Dingman, Paul R.	Ps g		209 St. Nicholas Ave.

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
DiRado, George Dana	50	Marlboro	
DiRienzo, John Carl	51	Framingham	
Divoll, Robert Crane	50		33 Navasota Ave.
Dobie, Roberta Barratt	49	Millbury	Fanning Hall
Dobis, Marcia Rae	51	Wellesley Hills	Blakeslee Hall
*Donoghue, Sheila Veronica	49		23 Jones
Doran, Elizabeth Mary	Ed g		76 Paine
Doran, Mary Agnes	50		356 Chandler
Dornes, Kenneth Charles	49		10 Chippewa Rd.
Dow, Edwin P.	49	Rutland	
†Dowd, Barbara Alice	Ed g		13 Stoneland Rd.
Dowd, Earl Edmund	Ec g		3 Clive
Dowgert, Boleslaw Stanley	Ec s		17 Fairfax Rd.
Doyle, Robert Francis	52		28 Kilby
Drucker, Herbert	52	Montclair, N. J.	Estabrook Hall
Drury, Lawrence Calvin	49		13 Jeppson Ave.
Dryer, Arthur Oscar	49		162 Highland
Duncan, Thomas	51	New Haven, Conn.	16 Marble
Dunn, James Sylvester	G g	Niagara Falls, N. Y.	23 Minthorne
Dunn, John Joseph	50	Shrewsbury	
*Dworkin, Dorothea Barbara	50		93 Grand View Ave.
Dwyer, John Joseph	Ed g		123 Woodland
Dwyer, Richard Edward	51	Dalton	156 Woodland
Ecker, Nathalie	51		34 Amherst
Edinberg, Norman Joseph	49		69 Providence
Egan, Jean Helen	51	Sterling	
Eklund, William Henry	51		183 Vernon
Ela, Charles Waldo	49 ; Ec g		99 West
Elby, Albert Robert	49	New York, N. Y.	7 Kilby
Eliopulos, George N.	49		46 June
Eliopoulos, Wonna George	49		86a Elm
Elliott, Francis Edward	G F	New Haven, Conn.	73 Richmond Ave.
Elliott, Esther Bender	51	New Haven, Conn.	73 Richmond Ave.
Ellis, Ralph Warner, Jr.	50		22 Howland Terr.
Emory, Jewel Ann	52		48 William
Epstein, Rosaline	51	Gloucester	Fanning Hall
Erickson, George Carl	51	Gardner	Estabrook Hall
Ericson, Robert Henry	51	Auburn	
Ethier, Raymond Theodore	Ed g	Southbridge	Assumption College
Ewing, Eleanor Marion	51		6 Northridge
Fahey, Lawrence	52	Brooklyn, N. Y.	Estabrook Hall
Fairbank, Margaret Weir	52	Auburn	
Falk, Willy	50	Cairo, Egypt	6 Charlotte
Falko, John Michael	51		45 Endicott
Fallon, John Edward	52		12 Florence
Farmer, Eleanor	52	Boylston	
Farrand, Brent Triest	50	Liberty, N. Y.	16 Marble
Faucher, Vincent Roger	Ed g		97 Paine
Feldman, Raphael M.	49		21 Tahanto Rd.
Femina, Anthony Joseph	49	Milford	17 Hammond
Fesuk, Stephen Boris	52		14 Alpine
Field, Nancy Spooner	B s		20 Stark Rd.
Fink, Ernest Haskel	51	Framingham	
Finneran, Rita Elizabeth	Ed g		202 Stafford
Fipphen, John Stanley	49	Shrewsbury	
Fischer, Genevieve Agnes	51		108 Barnard Rd.
Fisher, Philip Brierly	49		3 Ferdinand
Fisher, Sally Lucia	Ps g	Bronxville, N. Y.	7 Shirley
Fisk, Bradley, Jr.	G g	Buffalo, N. Y.	18 Holden
Fitzback, Henry Marcel	50	Webster	
FitzGerald, Paul R.	49	Spencer	
Fitzmaurice, Henry Francis	H g		194 Clark
Flagg, Earle Vincent	51		115 Brooks
Flaherty, Joan Marie	49		50 June
Fleming, Marie Frances	50		461 Chandler
Flint, Charles Edward	51	Leicester	
Fohlin, Patricia Edwards	50		2 Young
Foley, Joann Marie	52		192 Highland
Foley, John Francis	G g		21 Larch
Foley, Vincent Donnell	51		17 Circuit Ave.

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Fontaine, Barbara Christeen	52	East Douglas	
Fontaine, Mary Kathleen	50	East Douglas	
Forand, Paul Robert	51		62 Lakewood
Forchielli, Enrico	50		20 Mulberry
Forgit, Raymond Wellington	52	Rochdale	
Forzley, Leo Bashara	51		88 Locust Ave.
Fox, Beverly Jean	51	Sturbridge	Woodland Hall
Fox, Robert William	51	Staffordville, Conn.	Greens Trailer Pk.
Frank, Marvin Irving	50	Bridgeport, Conn.	6 Agawam
Frazier, Philip North	50	Concord	921 Main
Freed, Aubyn	49		28 So. Flagg
Freelander, Samuel Julius	49		19 Waverly
Freitag, Joyce Jacqueline	52	Clinton	
French, James Charles, Jr.	49		5 Montague
Friedmann, Eric Martin	52		104 Providence
Friedman, Howard	Ps g		136 June
Frissora, Anna Loraine	49		128 Norfolk
Frodigh, Roland John	52		29 Quinapoxet Lane
Frost, Albert Edward	Ch g	East Douglas	
Galanto, Fred John	49		17 Rena
Galipeau, Raymond Philip	52		1060 Pleasant
*Galipeau, Robert P.	52		1060 Pleasant
Gallagher, Mary June	50		17 Wachusett
Gallo, Louis C.	49		115 East Central
Gammal, Albert Abraham	52		11 Hawkins
Garbose, Samuel Bernard	51	Gardner	36 Richards
Gardner, Richard Edward	49	East Pepperell	40 Richards
Gates, Ralph Lawrence	50		58 West
Gauthier, Kenneth Paul	52		17 Coburn Ave.
Gay, Clifford Clyde	50	Leicester	
Gay, Frederick John, Jr.	51		66 Dorchester
Gearin, Barbara Mary	49		16 Alsada Dr.
Gefen, Stanley Jerome	52	Roxbury	Estabrook Hall
Gendreau, Robert Henry	52	Spencer	
Gendron, Lillian Louise	50	Southbridge	Blakeslee Hall
Gibbs, Richard Warren	52		3 Stoneland
Gibson, Stuart C.	49	Northboro	
Gifford, Raymond Thornton, Jr.	52		49 Berwick
Giles, Wesley Reginald	52		17 Branch
Gillespie, Arthur Merton	Ed g	Northbridge	
Gillson, George Edward	50		51 Richmond Ave.
Ginett, Lyndon E.	49	St. Albans, Vt.	919 Main
Giobellina, Mary Angela	50	West Boylston	
Gleason, Mary Jean	52		46 Chamberlain Pkwy.
Gold, Julius Sherman	50	Bridgeport, Conn.	8 Norwood
Goldberg, David Harold	50	Colchester, Conn.	21 Grand
Goldberg, Norma Josephine	52		36 Brantwood Rd.
Goldfaden, Allen Robert	50	Norwich, Conn.	53 Maywood
Goldman, Janet Lammertz	H g	Leominster	
Goldman, Martin	51	Boston	57 Maywood
Goldstein, Arthur	51		5 Van
*Goldstein, Diane Rhoda	51	Brookline	Woodland Hall
Goldstein, Edward Martin	50	Brookline	995 Main
Gollin, Eugene Simon	Ps g	Brooklyn, N. Y.	21 Grand
Golner, John Russell	49	Allston	4 Thayer Court
Golumbuk, Leon Hersch	51		53 Midland
Gonzalez, Alfonso	49	New York, N. Y.	23 Gardner
Goodale, Paul Alan	52	Leominster	
Goodell, Robert Proctor, Jr.	51	Shrewsbury	
Goodlight, Edward Thomas, Jr.	51		187 Delmont Ave.
Goodman, Charles David	49	Brooklyn, N. Y.	18 Claremont
Gordon, Walter Kelly	50	Brooklyn, N. Y.	40 Richards
Gorrell, Robert Bryce	Ps g	Camp Hill, Pa.	941 Main
Goss, Edward Charles	52	Fishers Is., N. Y.	Estabrook Hall
Graden, Harold Ragnar	50		16 Paul
Grader, George Wilson, Jr.	50	Marblehead	11 Highland Ter.
Graf, Robert Edmond	52	Southbridge	Estabrook Hall
*Graham, Elinor N.	Ed g		39 Canton
Graham, Russell Arthur	50		46 Oread
Grandberg, Harold Bertram	52	Newton Center	Estabrook Hall
Granger, Wilfred Richard	Ed g		4 Raleigh

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Graves, Harold Oliver	49	West Boylston	
Graves, Pauline Elizabeth	51	Woronoco	Blakeslee Hall
Gravin, Laurence Alan	51	Rochester, N. Y.	Estabrook Hall
Gray, Patricia Burritt	52	Plainfield, N. J.	Woodland Hall
Green, Howard Leon	G S	Millburn, N. J.	18 Tallawanda Dr.
Green, Robert Fried	49		3 Hanna
Green, Ruth Elizabeth	50		1 Kenilworth
*Greenberg, Roy Kasen	52	Brooklyn, N. Y.	32 Richards
Greenlaw, Robert Wilson, Jr.	52		14 Oread
Greenwald, Aubrey	52		18 Healy
*Gregory, Harold Anthony	H g		138 Belmont
Grove, Richard Irving	51		22 Berkmans
Guest, Ann Talbot	49	Princeton	Woodland Hall
Gunther, Kenneth William	50	Rochester, N. Y.	9 Congress
Gustafson, Richard Lyman	52		151 Murray Ave.
Gustafson, Russell John	49		32 Kosta
Guthrie, Joanne Patricia	50	Toledo, Ohio	Blakeslee Hall
Guy, Robert Woods	51		527 Salisbury
Gwynne, Nettie Thayer	49		12 Ivanhoe Rd.
Haberman, Gilbert A.	49	Springfield	36 Richards
Haddad, Richard John	49		7 Malden
Haddad, Theodore Abraham	52		2 Dartmouth
†Haefner, Don Paul	52	Albany, N. Y.	32 Oberlin
Hafstrom, Carl Howard	52	Sutton	
Haher, Donald Francis	H g	Staten Is., N. Y.	6 Agawam
Halkyard, Neil Washington	G s	Boylston	
Hall, Evarts Curtis, Jr.	51	Auburn	
Hampton, Faith Althea	52		15 Reservoir
Hanley, Edward Anderson	51	Monson	Estabrook Hall
Haroian, Mary	Ps S		43 Laurel
Haroian, Pearl	50	Clinton	
Harries, David Lyndon	Ps g	Ocean Grove, N. J.	2 Isabella
Harris, Jean Barrow	49	Fitchburg	Woodland Hall
Harris, William Eldon	49		28 Clifton
Hartocollis, Peter	49	Brooklyn, N. Y.	126 Coolidge
Haskins, Nancy Chandler	50	Hanover	Blakeslee Hall
Hassan, Mohamed Ibrahim	G g	Cairo, Egypt	893 Main
Haworth, Herbert Arthur	50	Dalton	Estabrook Hall
Hayeck, Albert S.	49		20 Ridge
†Hayhow, Ernest Herbert	51		42 Shattuck
Healey, Frank Henry, Jr.	Ch g		5 State
Hebert, R. Vivian	BA s		17 Souther Dr.
Heckman, Warren Keith	50		508 Grove
Hedberg, Harold Walter	49		1 Patch
Hedenberg, Kenneth Bruce	51		236 Beverly
Hefner, Ruth Marie	51	Southbridge	
Hegvig, Virginia May	52		9 Frank
Held, Colbert Colgate	G g	Clinton, Miss.	38 Benefit
Heller, Martin	49	Brooklyn, N. Y.	18 Claremont
Helm, David A.	49		10 May
Hemmendinger, Larry	Ps g	Hillside, N. J.	14 Charlton
Heroian, Sharkey	50		165 Dewey
Hertzmark, Rhoda Gay	51	Waterbury, Conn.	Fanning Hall
Hessen, Willard Carl	G g	Two Harbors, Minn.	511 Park Ave.
Hicks, Walter Braxton	50		114 June
Hifny, Mohamed Bahy	G g	Guiza, Egypt	81 Florence
Higginbotham, Forrest Ivan	49		4 Pelham
Higgins, Nancy Marie	50		151 Morningside
Higgins, William T.	49	Hingham	845 Main
Hilborn, Elizabeth Ann	50	New York, N. Y.	Woodland Hall
Hill, Barbara Ann	52	Southboro	
Hill, Joseph Allen	51	Albany, N. Y.	Estabrook Hall
Hill, Nelson Richards	49	E. Greenbush, N. Y.	731 Pleasant
Hill, William Alexander	G g	Columbia, Mo.	35 May
Hixon, Charles Carroll	49	Framingham	
Hobin, John Francis	Ed g		22 Fairhaven
Heonig, Matthew Michael	51	Dudley	
Hofschire, Irja Rachel	49		32 Forbes
Hohne, Russell Werner	51		28 Marconi
Hokans, Corlyn Barnes	52		61 Everard
Hokans, David Hamlin	51		61 Everard

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Hokanson, Leonard Ray	51		31 John
Holdroyd, Harriet Lucia	50	Spencer	Fanning Hall
Holloran, John Stephen, Jr.	51	Monroe, N. Y.	52 Woodland
Holm, David Roland	51		69 Eagle
Holmes, George Everett	49		27 Holden
Holmgren, William Olaf	52	Brookfield	Estabrook Hall
Holton, James Vernon	52	Irvington, N. J.	Estabrook Hall
Hones, Gerald Harry	G g	Cornwall, England	10 Lowell
Horowitz, Samuel	50	Mattapan	Estabrook Hall
Hortman, Helen Flygare	49	Hortman, La.	43 Lancaster
Hortman, Jacob Cyrus, Jr.	49	Hortman, La.	43 Lancaster
Houle, Constance Madeline	52		94 Richmond Ave.
Houle, Paul Wendell	51	Gardner	40 Richards
Howe, George Marvel	G g	W. Hartford, Conn.	48 Downing
Hoyt, Joseph Bixby	G F	Fiskdale	
Humphrey, Willard Richard	52	Binghamton, N. Y.	Estabrook Hall
Hunsberger, Mary Jane	51	Middletown, Conn.	Woodland Hall
Hurvitz, Cecile Gloria	51		24 Colonial
†Hunt, Roger Alling	M s		20 Kenilworth Rd.
Hurwitz, Irving	Ps g		604 W. Boylston
Hutchinson, Mary Elizabeth	52	Clinton	
Hyszczak, Peter Paul, Jr.	51	Hempstead, N. Y.	Estabrook Hall
Iacobucci, Albert John	52	Clinton	
Iacovelli, Ruth Adeline	52	Sterling Jct.	
*Illingworth, Robert K.	50		209 Lovell
Ingebretsen, Edward Martin	52		33 Boston Ave.
Ireland, Richard Maxwell	Ec g		25 Catharine
Irwin, Winnifred Morton	H TF	Vancouver, B. C.	17 Isabella
†Italiano, Armando Robert	52		38 Shamrock
Jackman, Albert Havens	G g	Shrewsbury	
Jackson, Priscilla Rosalie	51		89 Eunice Ave.
Jacobs, Charles Henry	52	Old Hickory, Tenn.	Estabrook Hall
Jaffe, Mitchell	49		40 Mendon
*Jameson, Harold, Jr.	49		1 Jenkins
*Jamgochian, Hagop	49	Shrewsbury	
Jandron, Roland Leo	52	North Oxford	
Jasen, Myrna B.	49	New York, N. Y.	Blakeslee Hall
Javery, Milton Henry	50		72 Salem
Jennings, Stephen Lester	52	Bethesda, Md.	Estabrook Hall
Jerome, Kathryn Ann	Ed g		28 Circuit Ave.
Jewell, Allan W.	49	Webster	
†Jianos, Frances Agnes	51	Holden	
Jigarjian, Harold Charles	52	Whitinsville	
Johnson, Betty Ellen	51	North Grafton	Blakeslee Hall
Johnson, Dorothy Anne	49	Holden	Fanning Hall
Johnson, James Myron	Ed g		7 Edgewood
Johnson, Emil Luther	50	Lottefors, Sweden	16 Everard
Johnson, Phyllis Constance	51		612 Sunderland
Johnson, Robert Earl	51	Southbridge	
Johnston, John MacKenzie, Jr.	50	Leicester	
Johnston, Norman	52	Spencer	
Johnston, Sally Davies	51	West Boylston	Woodland Hall
Johnstone, John Oliver	51	Holden	
Jones, Dudley Palmer	49		126 Clark
Jones, James Patrick	G g	Lincoln, Neb.	939 Main
Jones, Louis Allman	50	Ashburnham	35 Maywood
Jones, Margaret Elizabeth	50	Southbridge	Fanning Hall
Jones, Mary Kathryn	51	Southbridge	
Joynt, Carey Bonthron	H F	Hensall, Ontario, Can.	94 Lakewood
Justice, George Warren, Jr.	50	Woburn	
Kachadorian, Harry	50		41 Jaques Ave.
Kalil, Eli	50		919 Main
Kalil, Raymond	50		119 Hamilton
Kalin, Robert	50	West Hartford, Conn.	11 Charlotte
Kaloosdian, Robert Aram	52	Watertown	Estabrook Hall
†Kamandulis, Donald Algerd	52		10 Strathmore Rd.
Kane, Phyllis Elaine	49		63 Brownell
Kane, William Francis, Jr.	51	Marlboro	
Kant, Rena Susan	51	Shrewsbury	

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Kaplan, Bernard	Ps g	Brooklyn, N. Y.	875 Main
Kaplan, George Robert	H g	Brighton	511 Park Ave.
Karagheusian, Paul	52		18 Laurel
Karazia, Ernestine Vanda	50		82 Harlem
Karvonen, John Waldo	51	Shirley	64 Woodland
Kasabian, Robert John	52		38 Terrace Dr.
Katz, Alice F.	49	New York, N. Y.	Blakeslee Hall
Katz, Ruth Marion	52		1A Agawam
Kaufman, Stephen Lloyd	51	New York, N. Y.	36 Richards
Kauppila, Walter Uljas	52	Paxton	
Keegan, Martin Leo, Jr.	49	No. Oxford	
Kelleher, Noeline Ann	52	Boylston	
Kelleher, Robert Leo	49		6 Algonquin Rd.
Kellogg, David Hodgkins	49	Springfield	32 Gates
†Kelly, James Antony, Jr.	51		46 Woodland
Kelly, Lenore Marie	G g	Brockton	6 Wyman
Kemp, Betty Mary	50		552 Chandler
Kemp, James Malcolm	49	West Boylston	
Kennedy, Edward Aloysius	Ed g		21 Clearview Ave.
Kennedy, Louise Marie	50	Auburn	
Kerber, Raleigh Burton	52	Leicester	
Keyes, Robert James	51		52 Gardner
Kiewra, Stanley Francis	51		8 Hillside
Kinchy, Frederick Joseph, Jr.	52		20 Whitman Rd.
*King, Bettye Mary	50	Spencer	
King, Robert Edward	52	Leicester	
Kinney, Gwendolyn Jane	50		38 Hillcrest Ave.
Kirby, John Redmond	52	So. Portland, Me.	Estabrook Hall
Kirby, Robert William	51	So. Portland, Me.	107 Illinois
Kneeland, David John	49		5 Shepard
Knight, Carolyn	49		47 Brownell
Knox, Roy Irving	Ec g	Leicester	
Kohne, Thiel John	H g	Duluth, Minn.	511 Park Ave.
Korzun, Sophiamarie Roberta	50		83 Penn Ave.
Kosciusko, Theresa Christine	51		368 Greenwood
Koskinas, Liberty Catherine	51		61 Providence
Kowal, Edna Elizabeth	50		6 Lisbon
Kozak, George	52	Upton	
Krafft, Edwin Washington	G g	Springfield	17 Birch
Krajewski, Irene Rose	49		5 Norwood
Kramer, Herman Harry	52		66 Chandler
†Krochalis, Anthony Vitie	51		66 Seymour
Kubacki, Teresa Caroline	52	Arlington, N. J.	Fanning Hall
Kubiak, Barbara Ruth	51		112 Dana Ave.
Kyi, Ma Thin	G g	Thaton, Burma	46 Tirrell
Labenski, Therese Mary	49		69 Harlem
Labovites, Costas James	52		82 Clayton
Lacouture, Alphonse Leon, Jr.	52	Millbury	
Laine, Oliver Herman	G g	Harrisburg, Pa.	38 Benefit
Laipson, Samuel Mayer	51		5 Farnum Ter.
Lalor, Pierce Christopher	G g	Framingham	9 Hadwen Lane
Lamb, Bert Woodworth, II	52	Schoharie, N. Y.	Estabrook Hall
Lambros, Nicholas	51	Clinton	
Lamport, Marjorie Roth	50	Southbridge	
Lancey, Robert Alan	51	West Townsend	1046 Main
Lapham, Marjorie	50		5 High
LaPierre, Raymond Lloyd	49	Leominster	
LaPierre, Richard Alan	52	Gardner	Estabrook Hall
†Larkin, Alice Brennan	BE		155 Mayfield
Larson, Alden Alfred	Ed g	Shrewsbury	
Laska, George	51		13 Converse
Lawson, Hugh Harold	52	Warwick	Estabrook Hall
Leavitt, Milton	49		27 Derby
Leavitt, Phillip Arthur	52	New York, N. Y.	Estabrook Hall
LeBeau, Raoul Joseph	52	Spencer	
LeBlanc, Beatrice Yolande	50	Gardner	Woodland Hall
LeClair, Edward Emile, Jr.	Ec TF	Southbridge	
LeClaire, Robert Lawrence	51	Millbury	
Lee, Harold James	51	New York, N. Y.	40 Richards
Lee, William John	51		1 Norwood
Lekas, Mary D.	49		323 Pleasant

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Lemire, Marie Ernestine	49		20 Gates
Lennan, Geoffrey Wendell	50		65 Brantwood Rd.
Leonard, Robert Martin	51	Shrewsbury	
Leone, Anthony Daniel	49		112 Clayton
Lepore, Francis Edward	49	Clinton	
Leroux, Lorraine Theresa	49	East Brookfield	
Leslie, John Charles	51		93 May
Levine, Arlene Marcia	52	Brooklyn, N. Y.	Fanning Hall
Levy, Alfred Jacob	49	Dorchester	36 Richards
Liberty, Kenneth Earl	50	No. Uxbridge	
Liberty, Richard Robert	49		682 Main
Lilley, John Robert, II	51		127 So. Ludlow
†Lindberg, Marjorie Christine	50	Leicester	
Lipson, Richard Ralph	52		155 Providence
Listewnik, Henry Vincent	51		407 June
Little, Dana Anton	G g	Brunswick, Me.	10 Blaine Ave.
Ljungberg, Betty Pauline	49		46 Eunice Ave.
Lockhart, John	52		8 Quincy
Lonstein, Alfred Irving	52		35 Tirrelll
Loomer, Sumner Wellington	51	Shrewsbury	
Lord, Edgar Dana	Ed g	Holden	
Loweth, Gerald Philip	50	Norwich, Conn.	53 Woodland
Lumb, Ralph Francis	Ch g	Shrewsbury	
Lund, Robert Edward	51	Port Chester, N. Y.	13 Gates
Lurier, Janice Evelyn	50		231 Park Ave.
Lurier, Norman Merrill	51		231 Park Ave.
*Lussier, Jeanne Margaret	51		49 Kingsbury
Lynch, Jean Mary	51		95 Fairfield
†Macchi, Italo Alden	B g		37 Anderson Ave.
MacDowell, George Ferno	Ec g	P. E. Is., Canada	422 Washington St. Wellesley Hills
MacFayden, Fred Simms	52	Kearny, N. J.	Estabrook Hall
MacFarland, Jameson David	51		182 Millbrook
MacGillivray, George Charles	G g	Arlington	144 Maywood
MacGilvra, Bruce Ronald	52		15 Monadnock Rd.
Macintyre, Jean Warren	51		4 Davidson Rd.
MacKay, Norman Dale	49		1 Wakefield
Macomber, William Bernard	Ps g	Framingham Center	
Mahoney, James Martin	H g	New Haven, Conn.	5 Ferdinand
Mahoney, Joseph Peter	51		9 Greendale
Majeed, Abdul Amir	G g	Baghdad, Iraq	20 Gates
Mancini, Mario	51		9 Forestdale
Mancevice, Ruth Beatrice	49		29 Cutler
Mann, June Lorraine	52	Turners Falls	10 Brewster
Manter, Gloria Inez	G S	Chevy Chase, Md.	24 Gates
Manzi, Dolores Maria	51	Webster	
Manzi, Lucian Arthur	51	Shrewsbury	
Marcus, Gerald Golden	52		5 Havelock Rd.
Marshall, Jean Marion	51	Framingham	Woodland Hall
Marshall, John Francis	51	Brooklyn, N. Y.	3 Oliver
Marsoopian, Anita	50	Whitinsville	
Martel, Raymond Joseph	50		10 Dallas
Martel, Robert William	50	Webster	
Martin, Anna Mae	Ch g	Springfield	12 Allendale
Martin, William Butler, Jr.	Ch g	Ashburnham	59 Maywood
Martus, Joseph Armand	Ch g		College of the Holy Cross
Mastroberti, Rocci Stephen	50		38 Superior Rd.
Mayhew, Irma Joyce	52	Vineyard Haven	Blakeslee Hall
†Maynard, Oscar Alfred	Ed s		12 Clearview Ave.
Maynard, William Snyder	52	Fishers Is., N. Y.	100 Woodland
*Mayo, Ralph Carlson	G g		4 Perkins
Mazur, Anne Regine	50		42 Perry Ave.
†Mazur, Bernard	Ed g		153 Chandler
McBreen, Anne Marie	H S	Staten Is., N. Y.	939 Main
McCabe, Kathryn Lovejoy	49		77-3 Park Ave.
McCauley, Donald Frederick	51		509 Burncoat
McCourt James Carson	52		66 Greeenhill Pkwy.
McDonald, John Joseph	49	Paramus, N. J.	16 Marble
McDonough, Thomas Joseph, Jr.	49		15 Paine
†McGrath, Anna Nichols	50	Marlboro	

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
McGrath, Marshall Conrad	51	Rochester, N. H.	40 Richards
McGrath, Mary Elizabeth	49		583 Cambridge
McKeeman, Gordon Butler	Ps g		43 Oberlin
McLean, William Andrew	51		29 Westfield
McMurtrie, John W.	49	New York, N. Y.	17 Isabella
†McNulty, James Martin	52		87 Lakewood
Mee, John Courtney	52	Framingham	
Meissner, Philip George	51	Little Neck, N. Y.	40 Richards
Mellin, Alan Gilman	51	Melrose	16 Marble
Menard, Robert Wells	49	Shrewsbury	
Mendelsohn, Joseph Meyer	52	Revere	Estabrook Hall
Mensoian, Michael George, Jr.	49		23 Henchman
Mero, Esther Barbara	49		363 Cambridge
Meskunas, John Peter	52	Waterbury, Conn.	Estabrook Hall
Michaelian, Peter Andrew	52		179 Belmont
Michelson, Stanley Lucius	49		83 Mill
Mikoloski, Vincent Stanley, Jr.	50		25 Rob Roy Rd.
Miller, Rex Clinton	G g	Bloomfield, Iowa	41 King
Minasian, Minas	52		22 Hawley
Minasian, Vasken	50		227 Chandler
Mirin, Bernard	Ps g	Brooklyn, N. Y.	42 Freeland
Mitchell, Richard P.	49		74 Plantation
Modlinger, Ralph Elmer	B g		127 Highland
Moffatt, Richard Andrew	49	West Boylston	
Mohr, Tom Leopold	51	New York, N. Y.	Estabrook Hall
Mollo, Constantine D.	51		20 Millbrook
Mondore, Edward	51	Albany, N. Y.	100 Woodland
Mongeon, Norma Joyce	51	Millbury	
†Monkiewicz, Wojciech	Aud	Oakdale	
*Montcalm, Aline L.	Ch g	Holyoke	42 Dana Ave.
Mooradkanian, Edward Harold	51	No. Andover	40 Richards
Moore, Lloyd Weymouth	52	Miami, Fla.	Auburn
†Morello, Robert Angelo	51		6 Norfolk
†Morgan, Jesse Johnson, Jr.	En s	Auburn	
Moriarty, Marion L.	49		34 Florence
Morin, Gerald Joseph	49	Fisherville	
Morrison, Daniel Joseph	52		104 Darrow
Moseley, William Richard	49		547 Park Ave.
Mosher, Richard Sidney	52		24 Davidson Rd.
Moskowitz, Silkaly	Ps g	Brooklyn, N. Y.	3A Clement
Moyer, Carrie Josephine	G F	Reading, Pa.	455 Park Ave.
Muir, Jeanne Viola	50		301 Burncoat
†Mulligan, William Dunning	51		33 Gifford Dr.
Murawski, Benjamin Joseph	49	No. Oxford	
Murdock, Arthur Chandler	51		2 Fern
Murphy, Ann Marie	52		220 Lovell
*Murphy, Paul Florence	50		56 Orange
Murray, Pauline Anne	49		65 Kenwood Ave.
Mutch, John Davidson	H F	Bridgeport, Conn.	181 Mayfield
Myers, Wallace Haslett	51		3 Old English Rd.
Naas, Charles Willis	49		92 Lovell
*Naas, Jean Bolen	50		92 Lovell
Nason, Natalie Eva	G g	Orono, Me.	2 Downing
Nasse, Alyne May	52	Southbridge	100 Woodland
Nasse, George Nicholas	52	Southbridge	100 Woodland
Navaroli, John Anthony	52	Clinton	
Nazarow, John Peter	51	Gardner	
Neary, Beatrice Loretta	50		193 Park Ave.
Neiditz, Marvin Myer	52	Hartford, Conn.	Estabrook Hall
Nelson, Betty Louise	51		33 Gosnold
Nelson, Polly Katherine	51	Adams Basin, N. Y.	Blakeslee Hall
Nelson, Robert Alfred	Ec g	Norwood	
Nelson, Roy Stanley	51	Holden	
Nelson, Thomas Leverett	51	Northboro	Estabrook Hall
Niarchos, Constantine Thomas	51	Pittsfield	919 Main
Niarchos, Peter Thomas	51	Pittsfield	919 Main
Nicholas, Violette	52		17 Goulding
Nicholas, Virginia	51		17 Goulding
Nichols, Arthur Wilder, Jr.	50		178 Lincoln
Nichols, Norton, Jr.	G g	Cedarpines Pk., Calif.	1 Aster Place
Nicola, James	51	Bridgeport, Conn.	Estabrook Hall

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Nierendorf, Roy Arthur	Ed g		773 Pleasant
Nimmo, John	52	Long Is. City, N. Y.	Estabrook Hall
Nims, Robert F.	49		162 Highland
Noble, Ralph Everett	52	Whitinsville	
Noland, Pearl	G F	Hannaford, No. Dak.	113 Washington Auburn
Nolin, Emile Francis	50	No. Agawam	35 Maywood
Noone, James Joseph	Ed g		330 Hamilton
Norman, Albert	H g		8 Flagg
Norton, John Ernest, Jr.	50		11 Duxbury Rd.
Novakoski, Edward Anthony	52		246 Vernon
Novitch, Richard Leonard	52	Marlboro	
Obremski, Edward	51		11 Dorchester
O'Connell, John Joseph	52	Westboro	
*O'Connell, Marie F.	Ed g		24 Oread
O'Connor, Agnes Mary	49		3 Ashton
O'Connor, Lawrence Stephen	50	No. Brookfield	
O'Donnell, Albert Burke, Jr.	52	Shrewsbury	
Ogilvie, Bruce Crossan	G g	So. Portland, Me.	West Boylston
O'Grady, Margaret Rita	51		2 Pelham
Olson, Benedict Oliver	50		3 Ridgewood Rd.
O'Neill, Alan Edward	51	Farnumsville	
†Orleans, Agnes	52		5 Claremont
Orman, Sidney Bernard	51		12 Woodford
Ostergaard, Robert Alden	52	No. Grafton	
Ostlund, Leonard Alexander	Ps S	Leicester	
Ostroff, Barbara June	49	Gardner	Woodland Hall
Oswell, David Dill	51		59 Dewey
O'Toole, Charles Stuart	50	Leominster	35 Maywood
Oudheusden, Frank Peter	51	Rye, N. Y.	35 Maywood
Ouellette, Claire Eva	52	Lunenburg	Woodland Hall
Pacek, Walter John	50		1 Pitt
Pagnotto, Leonard Domenic	49	Fitchburg	
Palley, Melvin Mayer	49		12 Arthur
Palmer, Islay Isabelle	50	Southbridge	Woodland Hall
Palubin, Ruth Mary	Ps s	Norwich, Conn.	Worcester St. Hosp.
Panaccione, Joseph John	49	Barre	16 Marble
Pannkuk, Berend David	49	Topeka, Kansas	13 Gates
Pappas, Charles	50	Webster	
Pappas, Daniel J.	49	Webster	
Pappas, Ernest James	51	Webster	Estabrook Hall
Parker, Edward Thomas	49	Whitinsville	
Parker, Fred Walter	50		766 Main
Parker, George Knight	52	Sterling	
Patronas, Eleas William	51		59 Dorchester
Patterson, Janet Ann	52		17 Rockdale
Pawlikowski, Daniel Felix	51		138 Elm
Pentland, Robert Howard	51		178 June
*Perch, Emmanuel Sahag	Ec g		110 Chandler
Peterson, Paul Norman	51		15 Lorenz
Petrakogeorges, Heraklis	52	Clinton	Estabrook Hall
Petrell, Edward Francis	52	Rockland	Estabrook Hall
Petrell, Ralph Joseph	52	Rockland	Estabrook Hall
Phelps, Charles Foskett	51		7 Ruth
Phelps, Ernest Davis	Ec g	Auburn	
Phillips, Albert George, Jr.	51	Audubon, N. J.	1003 Main, Leicester
Phipps, Clarence Ray	51	West-Upton	
*Pike, Sidney	51	Mattapan	
Pincus, Jacob C.	49	Brooklyn, N. Y.	36 Richards
Piper, Barbara Ruth	50	Leominster	21 Bowdoin
Pizzuto, Carmen Santa	Ps g	Pittsfield	1 Hancock
*Plakstis, Peter John, Jr.	49		35 Maywood
Plucinski, Robert Paul	51		7 Firglade Rd.
Plue, Bradford Barrett	49		1020 Main
Plumb, Robert Charles	49		1 Genesee
Plummer, Franklin Pierce	51	Silver Creek, N. Y.	8 Clifton
Polastri, Joseph Eugene	50	Branford, Conn.	100 Woodland
Pollack, Robert Harvey	Ps g	New York, N. Y.	160 Highland
Pongowski, Florence Josephine	51		83 Ward
Ponty, Louise Dolores	52		30 Derby

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Pope, Henry William, Jr.	49	Fairhaven	30 Hollywood
Porton, Marjorie June	50		373 May
†Powell, Margaret Rose	FA s		18 Robertson Rd.
†Praderio, Natalie Rita	Ed g	Clinton	
Pratt, Kenneth William	49	Leicester	
Price, Raymond Arthur	51	Lunenburg	
Proctor, Patricia Woodbury	G g	Northboro	
Proctor, Robert Merton	50		1342 Pleasant
Proodian, Valerie Mary	51		25 King
Pryor, Robert Edward	51	So. Berlin	50 Woodland
Puniskis, George John	49		170½ Washington
Putnam, George Clinton	52		53 Navasota Ave.
Putnam, William Bennett	51	Shrewsbury	
Quinn, Edward William	49		37 Stoneland Rd.
Raffa, Romolo Louis	50		54 Alvarado Ave.
Rafkin, Myron David	52	Quincy	Estabrook Hall
Ragoza, Stanley	52	Leeds	Estabrook Hall
Randall, Lawrence Edward	G g	Framingham	3 Hancock
Rassias, Charles Nicholas	51		20 Hackfeld Rd.
Ravitz, Janice Zelda	52		16 Blossom
Razzo, Clementine Patricia	H S	New York, N. Y.	6 Agawam
Reardon, William Robert	49		13 Oliver
Reddy, Martin Matthew	50	New York, N. Y.	16 Marble
Reed, Benjamin Victor	49		50 Providence
Reed, Katharine Aileen	Ed g		81 Florence
Rees, David John	49	Albany, N. Y.	14 Oberlin
*Reilly, Joseph Leo	51		37 Clifton
Reinwald, Lewis Theodore	G F	Springfield, Ohio	6 Downing
Retallick, Harold James	G g	Eau Claire, Wis.	South West Cut-off
Reycroft, David G.	49	Arlington	35 Maywood
Reynolds, Paul Edward	52	Dudley	
Rice, Thomas Frederick	52	Buzzards Bay	Estabrook Hall
Richards, Gerald Owen	51	Rockport, Me.	40 Richards
Richardson, Norman James	52	Braintree	Estabrook Hall
Richardson, Wendell Slayton	49	Bellows Falls, Vt.	4 Wyman
Rickard, William Jack	51		605 Millbury
Riggan, Byron Woodall	H g	E. St. Louis, Ill.	511 Park Ave.
Riemenschneider, Robert Eugene	51	Hammond, Ind.	86 Woodland
Riordan, James Francis	51		106 Richmond Ave.
Rivard, Leo James	52		682 Main
Roche, Claire Maureen	52		493 Park Ave.
Rodenstein, Lois Marion	52	Roxbury	Woodland Hall
Rogers, Donald Sargent	Ed g	Barre	
Rogers, Morrison Omer	52	White River Jct., Vt.	Estabrook Hall
†Rohan, Edgar Allan	Aud	W. Concord	
Rolston, Glenn Everett, Jr.	51		3 State
Romer, Clara	G S	Leeuwarden, Neth'l'ds	11 So. Flagg
*Rosati, Flavio Joseph	49		34 Gage
Rose, Barbara Elizabeth	52	Watertown, Conn.	Woodland Hall
Rose, Dorian Mabyl	Ps g		9 LaGrange
Rosen, Bernice Marion	Ps F	New York, N. Y.	24 Gates
Rosenbaum, Joseph Hans	G g	Lowell	53 Charlotte
Rosenberg, Alan L.	49		102 Granite
Rosenblatt, Bernard Philip	Ps g	Concord, N. H.	17 Oberlin
Rosenblatt, Melvin Morton	52		38 Woodford
Ross, Harmona Ferelith	Ps g	Dorchester	
*Ross, Henry Francis	RL s		364 Lincoln
Rothblatt, Helaine Lois	52	Brookline	Fanning Hall
Rubin, George	49	Brooklyn, N. Y.	33 May
Rubin, Marc Sheldon	50	New Haven, Conn.	36 Richards
*Rupkus, Ruth Cele	49		54 Sagamore Rd.
Russell, Henry Nelson	50		76 Mill
Ryan, James Grogan	52	Springfield	Estabrook Hall
Ryan, John Donaher	49	West Newton	6 Downing
Sachs, Howard Miller	52	Bridgeport, Conn.	Estabrook Hall
Sadick, Phyllis Muriel	50		10 Lenox
Sagerian, Mesack Harry	52		103 Austin
Salem, Emil John	50		31 Wall
Salem, William John	52		394 Grafton
Salvatelli, Geno Francis	51	Leominster	20 Gates

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Samara, Joseph	51		73 Orient
Sandberg, Richard Paul	49		62 Whipple
Sandy, Catherine Isabella	49	Shrewsbury	
Sandford, Frederick Shelton	G g	Ansonia, Conn.	41 King
Sanford, Millicent Jean	49	Clinton	
Sanford, William Warren	49	Starrucca, Pa.	16 Marble
Santor, Phyllis Barbara	Ger s		888 Southbridge
Sarando, Lucy Emerald	50		12 Page
Sawyer, David Erickson	51		18 Huntington
Sbrogna, Augustine Angelo	52		397 Shrewsbury
Scannell, Marguerite Ann	52		4 Judson Rd.
Schafer, Roy	Ps g	Stockbridge	
Schneider, Charles	52	New York, N. Y.	Estabrook Hall
Schollard, William James, Jr.	52		83 Florence
Schroeder, Peter B.	H F	Storrs, Conn.	
Schuman, Robert Laver	51	Hyannis	21 May
*Schwab, Bernard	49		934 Main
Schwartz, Martin	B g		105 Pleasant
Scott, Carl Eric	52		9 Victoria Ave.
Sears, Noel Chase	51		111 Barnard Rd.
Seaver, Ralph Adelbert, Jr.	52		12 Wellington
Seay, Claire Lorraine	51		32 Ames
Selzo, Joseph Robert	50		115 Ingleside Ave.
*Sen, Aroon Kumar	Ch g	Calcutta, India	1044 Main
Shapiro, Beatrice Pearl	52		45 Barclay
Shapiro, Leona Gertrude	52		45 Barclay
Shatikian, Khachatoor	51	Teheran, Iran	247 Park
Shaughnessy, Ann Marie	H S		16 Wakefield
Sheahan, Alice Elizabeth	51		57 Havelock Rd.
Shear, James Algan	G g	Pittsburgh, Pa.	974 Main
Sheehan, Francis P.	49	Bridgeport, Conn.	4 Stoneland Rd.
Shenian, Popkin	50		37 D
Sheppard, Frederick Neil	51		5 W. Oberlin
Shepro, David	B g	Holyoke	11 Charlotte
Sherman, William Andrew	50		6 Malden Terr.
†Shih, Li-chang	G S	Changsha, China	
Shiminski, Joan Mary	51		1036 Main
Shiminski, Paul Anthony	50		1036 Main
Shimukonis, Frank Joseph	49		26 Waverly
Shippee, Barbara Lucille	51	Sturbridge	
Shulman, Kenneth	50		168 June
Sibley, Edward Abbott	G g	Leicester	
Sibley William Frederick	50	W. Springfield	16 Marble
Siegel, Edward Louis	Ps g		34 Catharine
Sigel, Morton Herbert	51		94 Houghton
Simmons, Clark William	H g	Cooperstown, N. Y.	171 Woodland
Simonian, Harry	52	Whitinsville	
Simpson, Dorothy Louise	51	W. Boylston	
*Singer, John Jacob	Ch g		11 Oberlin
Sirk, Joel Hayden	50		15 Vassar
Sisson, Robert Eugene	52		75-6 Park Ave.
Skiddell, Harris	49	Chelsea	6 Charlotte
Skinner, Marguerite MacPherson	50		98 Forest
Skogstrom, Paul Robert	50		63 Eunice Ave.
Slechta, Robert Frank	49		25 Delawanda Dr.
Sleuman, Frank Henry, Jr.	51		3 Oliver
Smith, Ann Marie	51		70 Coolidge Rd.
Smith, Arthur Joseph	52		101 Merrick
Smith, Bruce Leslie	51	Rockport	30 Hollywood
Smith, Charles Francis, Jr.	50		81 Piedmont
Smith, Delwin Frank	51	Newtonville	1440 Main
Smith, Donald Everett	Ed g	Shrewsbury	
Smith, Helen Leonore	G F	Wheaton, Ill.	3 Shirley
Smith, Margaret Augusta	52		70 Coolidge Rd.
Smith, Nancy Southwick	52	Sutton	
Smith, Ray Harold	52	Braintree	Estabrook Hall
Smith, Raymond Rodolphe	52	Westboro	
Smith, Reginald Joseph	Ec g		201 St. Nicholas Ave.
*Smith, Richard Stanley	49		27 Lee
Smith, Robert MacNaught	50	N. Grafton	
Smith, Samuel Wallace	49	Sheffield, Ill.	Estabrook Hall
*Sobol, John Andrew	G g		85 Seymour

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Soderberg, Barbara Arlene	50		19 Breck
Sokoloff, Janet Sharp	50	New Haven, Conn.	Blakeslee Hall
Solomon, Paul	Ps g	Roxbury	23 Hollywood
Sonntag, George Joseph, Jr.	49		16 Jaques Ave.
†Sotiropoulos, Athanasius	52		128 Central
Sottery, Theodore Walter	49	Annandale-on-Hudson N. Y.	16 Marble
Southwick, Albert Brown	H g	Leicester	
Southwick, Miriam Katherine	Ps g	Meriden, Conn.	29 May
Southworth, Franklin Chester	51	Framingham	
Spalding, Judson Wylder	50	Auburn	
Spaulding, Norwood Langley	51		270 Moreland
Spaunburgh, Richard George	50		56 Coppersfield Rd.
Spencer, Harry Irving, Jr.	50		740 Pleasant
*Spungin, Charlotte Isabelle	51	Greenwich, R. I.	Woodland Hall
Spungin, Nathan	49		58 Granite
Squier, Dean Firth	50		49 Woodland
Stanhope, Russell Herbert	51		20 Rich
Stasiewicz, Henry Joseph	51		18 Epworth
Stavros, Esther	50		37 Hudson
Stearns, Harlan Emory	51	Winchendon	18 Shepard
Steinberg, Robert Malcolm	52	Norwalk, Conn.	Estabrook Hall
Steingold, Kenneth Harold	52	Pawtucket, R. I.	Estabrook Hall
Stevens, Donald Eberhardt	51	Branford, Conn.	E. Main, Oxford
†Stevens, Harry R.	Aud	Grafton	
Stewart, Gilbert Boynton	49	W. Boylston	
Stewart, Milton	51		7 Winslow
Stickney, Stanley Francis	51	Auburn	
Stolbof, Bernard	51	Albany, N. Y.	Estabrook Hall
Stolnacke, Richard Arthur	52		41 Tatman
Strandberg, Verner Raymond	52		1 Knapp
Strates, Basil Stavros	51		21 Morningside Rd.
Stratton, David Kent	52	Maplewood, N. J.	Estabrook Hall
Streeter, Delena Elizabeth	50		728 Burncoat
Strickland, Walter Robert	50	Fitchburg	
Stuebi, Elizabeth Parmalee	52	Springfield	Woodland Hall
Stuebi, Theodore G.	49	Springfield	21 Shirley
*Stupak, Ralph John	49	Leominster	245 James
Sturtevant, Thomas Charles	50	Concord	Estabrook Hall
Sullivan, Edward Patrick	50		466 Park Ave.
Sullivan, John Joseph	50	Lowell	23 Hollywood
Sullivan, Joseph Leo	52	Dodge	Estabrook Hall
Sullivan, Richard Patrick	52		14 Hitchcock Rd.
Sullivan, William Thomas	52	Braintree	Estabrook Hall
Sumner, Joseph	51		34 Loxwood
Sundquist, Gustaf Adolph, Jr.	52		104 Stanton
Supovitz, Irving Louis	50		34 Pattison
Svenson, David Andrew	52		30 Button
Swana, Michael Richard	50	Dudley	
Swansburg, Edward Freeman	49	Melrose	14 Oberlin
Swanstrom, John Eric	51		20 Neptune Rd.
Swanstrom, Kenneth Edwin	51		24 Holland Rd.
Swenson, Richard Waltner	Ch S		74 Florence
Symonds, Merrill Augustus	H g		98 Ararat
Symonowicz, Alfred Michael	52		49 Arlington
Tashjian, John Edward	49		29 Glen
Tashjian, Robert John	51	W. Boylston	
†Taylor, Gretchen Davis	H g	Spencer	
Taylor, Richard Allen	50	Charlton City	
Taylor, Robert Earl	52		107 Whitmarsh Ave.
Thayer, Nancy Ann	51	Shrewsbury	
Thomas, Constantine	49	Lowell	
Thompson, Vincent Paul	51		28 Lee
Thomson, John Roy	49		113 Winfield
Thurston, Roger Tucker	51		20 Juniper Rd.
Tibbetts, Raymond Eugene	51		77 Pine View
Tigar, Burton Sumner	52	Brighton	Estabrook Hall
Tillotson, Arline May	50		33 Lansing Ave.
Tillson, Robert Tyler	50		53 Morningside Rd.
Tivnan, Edmund Lincoln	49		109 Endicott
Todd, Joseph Robert	49; Ed g		15 Chadwick

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
†Tomiak, Janusz Josef	52	Dorset, England	524 Cambridge
Tomolonis, Albert Joseph	51		154 Vernon
Tonseth, Rolf Scott	50	Marlboro, N. H.	1041 Main
Torres, Allan Francis	51	Brooklyn, N. Y.	Estabrook Hall
Tosi, Joseph Andrew, Jr.	G g		6 Richards
Tosi, Peter Alexander	51	Sterling	
Tothill, William Robert	50	Hardwick	
Townsend, Joyce	49	E. Woodstock, Conn.	Woodland Hall
Trow, Warren Frank	50	Sterling	
Trussell, Barbara	51		41 Harvard
Tuckman, Harvey Mortimer	52	Norwalk, Conn.	Estabrook Hall
Turner, Albert Bristol	H g	No. Brookfield	
*Turo, Joseph Anthony	49		9 Shamrock
Tuttle, Roger James	52		125 Malvern Rd.
Twiss, Shirley May	50	Hyde Park, Vt.	Fanning Hall
Ullstrom, Paul Edward	51		28 Victoria
Vamvas, Joanne Helen	49		100 Richmond Ave.
Vance, James Elson, Jr.	G g	Natick	11 Charlotte
Vanderhoof, Irwin Thomas	B g	Boonton, N. J.	75 Lancaster
Vander Pyl, Adrian Weston	51	Rutland	
Van Steenburgh, David Raymond	50	Framingham	10 Charlotte
Vasil, George Victor	50		6 Rice Sq.
Vickers, Harold Earl, Jr.	50		138 Woodland
Vienneau, Gerald Joseph	50		3 Greendale
†Viens, Roger George	Ed g		21 Ives
Vigeant, Therese Jeanne	52		282 Harding
Viglucci, Andrew Thomas	51	Albany, N. Y.	40 Richards
Vilandre, Charles Victor	49		48 Plantation
Virchow, William Richard	Ed g	Needham	
Von der Heide, John Thomas	52	Scarsdale, N. Y.	Estabrook Hall
Wahlberg, Bertil Lennard	50		16 Marble
Walker, George Francis	50	Spencer	
Washburn, Elaine	50		9 Congress
Waterman, Irma	52	Attleboro	Woodland Hall
Watkins, Helen Eugenia	52		110 Barnard Rd.
Weagle, Ervin Eldred	50	Shrewsbury	
†Weaver, Miles Waverly	50	[illegible]	[illegible]
Webster, Charles Ellison	52	Whitinsville	
Weiner, Milton Gershon	Ps g	Leicester	
Weisberg, Leonard R.	50	New York, N. Y.	36 Richards
Welch, Francis Donald	52	Lynn	Estabrook Hall
Wells, Jacquelyn True	50		Blakeslee Hall
Wells, Walter Edward	50	Pepperell	5 Trumbull Sq.
Westcott, Roger Temple	50	Belmont	16 Marble
Weston, Ray Faunce	51	Mobile, Ala.	Estabrook Hall
Wetherbee, David Kenneth	51		11 Dallas
Wetmore, Clayton Andrew	51	Norwalk, Conn.	8 Clifton
Whalen, John Philip	Ed g		29 Richards
Wheeler, Alfred Lawrence	51	Leominster	3 Hancock
Wheeler, David	52	Revere	Estabrook Hall
Wheeler, Doanda Risley	52		73 Sagamore Rd.
White, David Elliott	Ec TF	Southbridge	
Whitney, Leon Edward, Jr.	52	Athol	1046 Main
Wicks, Robert Hascal	50		44 Bellevue
Wiegand, Dudley Wheeler	50		224 Lovell
Wiener, James Saul	52		92 Houghton
Wile, Robert Pershing	B s		128 Stafford
Williams, Malcolm	H g		79-2 Park Ave.
Williams, Ruth Anna	49	Northbridge	
Wilson, Carol	49		11 Berwick
Wilson, Mary Tewksbury	Ps g	Amsterdam, N. Y.	21 Fruit
Witkowski, Florence Joanne	49		136 Washington
Woessner, Russell H.	49		11 Dunbar
†Woo, David Yu Cheng	50	Hongkong, China	766 Main
Woodrich, Helga	50		638 Chandler
Woods, John Francis	51		102 Whitmarsh Ave.
Woolson, Gloria Dolores	50		102 Providence
Worth, Melvin Hersh	50	New York, N. Y.	36 Richards
Wylie, William James, Jr.	49	Feeding Hills	59 Maywood
†Wynne, William Mark	51	Manchester	10 Oliver

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Xenos, Richard Anthony	50		34 Lincoln
Yoffe, Graenem Abba	50		59 So. Lenox
Yorkston, Doreen Mary	H S	New Westminster, B. C., Canada	17 Isabella
*Young, Henry	Ps g	Brooklyn, N. Y.	42 Freeland
Young, Manoog Solomon	H g	Brookline	Fort Devens
Youngren, Betty Saunders	51		79 Lakewood
Zaharatos, Andrew John	50	New York, N. Y.	21 Shirley
Ziegler, Joan Carol	51	New York, N. Y.	Woodland Hall
*Zimmerman, Herbert Edward	51	Boston	21 Grand
Zitowitz, Lester	52		172 June
Zmyslowski, Walter Peter	52		28 Marion
Zuber, Leo Joseph	G g	Decatur, Ga.	36 Dale
Zuk, Henry	51	New York, N. Y.	16 Marble
Zukowski, Walter Henry	Ec TF		52 Fox
†Zukowsky, Raymond John	F 51		26 Julien Ave.

II. SUMMER TERM STUDENTS (1948)

An (*) indicates a student in residence for one session only.

*Abbas, Naji M., Kirkuk, Iraq
Abeles, Robert A., Worcester
Adler, Simpson B., Holden
Adrian, Richard F., Worcester
*Agamia, M. Abdel-Aziz, Alexandria, Egypt
Agulnick, Sidney, Worcester
Ahlstrom, John R., Worcester
Alexander, Lewis M., East Dennis
*Alexander, Newton W., Waterbury, Conn.
Amback, Reginald, Jr., Worcester
Anderson, Donald F., Worcester
Anderson, George W., Northboro
Anderson, John H., Shrewsbury
*Anthony, David L., Guilford, N. Y.
Aramony, William, Worcester
Archambault, John J., Worcester
Armenti, Ralph A., Worcester
Askling, Paul H., Leicester

Babigian, Vasgen, Worcester
Babineau, Alexis A., Worcester
Bachand, Clifford B., Worcester
Bailey, William A., Worcester
*Baird, Malcolm E., Worcester
*Baker, Mary L., Albany, Georgia
Banks, Donald A., Worcester
Barker, Louise H., Worcester
*Barnes, Clarence E., Taunton
Barrett, James J., Jr., Worcester
Baskin, Myron A., Kenmore, N. Y.
Bastille, John G., Worcester
Baum, Bernard, Brookline
Beaudry, Rene P., Worcester
Beck, Paul V., New York, N. Y.
Bellinger, Frank H., Maplewood, N. J.
*Belliveau, Arthur J., Gardner
*Benison, John E., Worcester
*Berg, George M., Worcester
Berg, Gordon W., Worcester
Bergstrom, Evelyn M., Millbury
*Berman, Mildred, Chelsea
Bernklow, Rodger D., Thompson, Conn.
Berthiaume, Joseph O., Southbridge
Berthiaume, Raymond O., Worcester
*Biedrzycki, Raymond F., Mendon
Birchard, Ralph E., Stillwater, Okla.
Bjork, John A., Worcester
*Black, Phyllis J., Vinalhaven, Me.
*Blom, Ernest L., Worcester
Blount, William G., Northboro
Boch, Oliver W., Patchogue, N. Y.
Bogosian, Paul, Worcester
Boisvert, Gregory L., Worcester
*Bolster, Marita L., Gardner
*Borjeson, Gilbert J., Worcester
Boudreau, Florence A., Worcester
*Bouve, Malcolm, Worcester
Boynton, Stanley M., West Boylston
*Bradford, Mildred S., Washington, D. C.
Brodeur, Richard R., Putnam, Conn.
Brooks, Harriet, Worcester
*Brown, Barbara D., Worcester
*Brown, Mildred E., Wormleysburg, Pa.
Brown, Richard C., Worcester
Bugbee, Betty E., Oxford
Burack, Joseph, Worcester
*Burns, Bernard J., Worcester
Burton, Dorothea E., Buffalo, N. Y.
Butterfield, Ruth A., Westminster
Byron, Russell E., Oakfield, Me.

Cahill, Henry E., Livingston, N. J.
*Caldwell, Harry H., Worcester
*Callan, Barbara A., Worcester
Callender, Joseph H., Boston
*Campbell, Catherine M., Marlboro
*Campbell, Janet, Ventura, Cal.
*Campbell, Robert D., Washington, D. C.
*Campbell, Robert J., Hudson
*Carbone, Francis A., Fitchburg
Cardozo, Robert L., New Gardens, N. Y.
Carey, Robert H., Worcester
Carlson, Kenneth W., Shrewsbury
*Caron, Constance E., Worcester
*Carswell, Catherine A., Glens Falls, N. Y.
*Caruso, Mary L., Burlington, N. J.
Carvalho, Vincent G., East Pepperell
*Case, Dale E., Lincoln, Neb.
*Cassidy, Clare T., Uxbridge
Chaberek, Stanley, Jr., New Bedford
Chang, Ching C., Kaifang, Honan, China
Charamella, John L., Worcester
Chase, Arnold D., Worcester
Chin, Philip S. T., Worcester
Chiras, Stanley, Whitinsville
*Chiriaco, Charles L., Worcester

*Christie, Janette, Worcester
*Chupis, Ruth A., Shrewsbury
Ciborowski, Henry J., Worcester
Coleman, Francis J., Worcester
Comalli, Peter E., Jr., Lee
*Connolly, Paul J., Worcester
Conover, Walter C., Red Bank, N. J.
Conway, Edward H., Bronxville, N. Y.
Cooper, Ralph C., Jr., Bethel, Conn.
*Costrell, Edwin S., Detroit, Mich.
*Coupe, George A., Worcester
Cournoyer, Paul R., Spencer
Courtney, James T., Worcester
Coyle, Thomas H., Jersey City, N. J.
*Crane, Vera R., Athol
*Craver, John E., Webster
*Creveling, Harold F., Norman, Okla.
Crickard, George E., Shrewsbury
Crockett, Harold E., Worcester
Crowley, John J., Worcester

*Dacier, Donald R., Marlboro
Dagirmanjian, Arthur, Whitinsville
Dansereau, Anthony P., Worcester
Daviau, Donald G., Worcester
Davidson, Chester J., Worcester
Day, Dorothy M., Waynesville, Ohio
*Day, Mildred L., Collingswood, N. J.
Dean, John H., Oswego, N. Y.
Dean, Robert J., Binghamton, N. Y.
Degermajian, George, Worcester
DelRosso, Stephen, Dorchester
Derosier, Robert F., Leominster
*Desimone, Samuel R., Worcester
*Desroches, Edward J., Southbridge
Dinerstein, Jenny, Colchester, Conn.
Divoll, Lincoln A., Worcester
Dolan, Carolyn A., Worcester
Donoghue, Sheila V., Worcester
Donohue, Harry J., Worcester
Dowd, Earl E., Worcester
Doyle, Herny M., Hudson
Drury, Lawrence C., Worcester
Dryer, Arthur O., Worcester
Duffy, James J., Worcester
Dugan, James O., Brookfield
Duncan, Thomas, New Haven, Conn.
*Dunn, John J., Shrewsbury
Dupre, Lawrence J., Worcester
*Dwyer, Gary B., Northbridge
Dwyer, Ralph E. Worcester

Ekblaw, Elsa M., North Grafton
Eklund, William H., Worcester
Ela, Charles W., Worcester
Elby, Albert R., New York, N. Y.
Eliopulos, George N., Worcester
Eliopulos, James N., Worcester
Eliopoulos, Wonna G., Worcester
Ellis, Ralph W., Jr., Worcester
Elsasser, Edward O., Washington, D. C.
*Embree, Reed F., Omaha, Nebr.
Eng, Shewlem, Yonkers, N. Y.
Ericson, Marion F., Auburn
Evans, David S., East Douglas

Fairbanks, Richard H., Worcester
Falk, Willy, Cairo, Egypt
Falko, John M., Worcester
Farnum, Forest T., Gardner
Feldman, Raphael M., Worcester
Femina, Anthony J., Milford
*Finn, George R., Worcester
Fisk, Bradley, Jr., Buffalo, N. Y.
FitzGerald, Paul R., Spencer
*Fitzmaurice, Herny F., Worcester
Fleming, LaMoyne H., Whitinsville
Foley, John F., Worcester
*Foley, John P., Worcester
Foley, Vincent D., Worcester
*Fraser, Frances F., Clinton
Freelander, Samuel J., Worcester
French, James C., Jr., Worcester
*Frissora, Anna L., Worcester
Frost, Albert E., Jr., East Douglas

Gale, Richard D., Worcester
Gallo, Louis C., Worcester
*Gauvin, Gerald R., New Bedford
Gay, Frederick J., Jr., Worcester
Gibson, Stuart C., Grafton
*Gillespie, Arthur M., Northbridge
Gleason, Gerald H., New Rochelle, N. Y.
*Glennon, Leo F., Worcester
Goldberg, David H., Colchester, Conn.
Goldfaden, Allen R., Norwich, Conn.
Gonzalez, Alfonso, New York, N. Y.
*Goodlight, Gertrude L., Worcester
*Gordon, Noah, Worcester
Graden, Thurston H., Worcester
Graves, Pauline E., Woronoco
Gray, Grant H., Cranston, R. I.
*Green, Edward A., Shrewsbury
Green, H. Richard, Shrewsbury
Green, Howard L., Millburn, N. J.
*Grossi, John R., Leominster
Grove, Richard I., Worcester
Gullbrand, Howard A., Worcester
Gurney, Fred V., Amesbury
Gustafson, Russell J., Worcester

Haddad, Richard J., Worcester
*Hague, Gladys E., Worcester
Haher, Donald F., Staten Island, N. Y.
*Hale, Richard S., Oxford
*Hale, Walter C., Toledo, Ohio
Halko, Henry J., Webster
*Halkyard, Neil W., Boylston
*Hallahan, John J., Worcester
Hanley, Edward A., Monson
Harris, Jean B., Fitchburg
Harris, William E., Worcester
Hartocollis, Peter, Worcester
Harwood, Irene M., New Bedford
Hayeck, Albert S., Worcester
Healey, Frank H., Jr., Worcester
Hedberg, Harold W., Worcester
*Held, Colbert C., Clinton, Miss.
*Held, Mildred M., Clinton, Miss.
Heller, Martin, Brooklyn, N. Y.
Helm, David A., Worcester
Hensas, Leonard K., Worcester
Higginbotham, Forrest I., Worcester
*Highberg, Emeline C., Worcester
Hixon, Charles C., Framingham
Hoenig, Matthew M., Dudley
*Hokans, David H., Worcester
*Hokanson, Leonard R., Worcester
Holland, Howard O., Worcester
Holloran, John S., Jr., Monroe, N. Y.
Holmes, George E., Worcester
Hortman, Helen E. F., Worcester
Hortman, Jacob C., Jr., Worcester
Hossack, Richard C., Worcester
*Howard, Katherine A., Brookfield
Hunsberger, Mary J., Middletown, Conn.

Hunt, John D., Worcester
*Hurowitz, Nason A., Worcester
Hurwitz, Irving, Worcester
*Husson, Michael A., Worcester

Ireland, Richard M., Worcester

*Jackman, Albert H., Shrewsbury
Jameson, Harold, Jr., Worcester
Jamgochian, Hagop H., Shrewsbury
Jamgochian, Michael, Shrewsbury
*Jamron, Kenneth S., Worcester
Jardarian, Zaven, Worcester
*Jaworski, Mitchell C., Worcester
Jewell, Allan W., Worcester
*Johnson, Gilbert J., Indian Orchard
*Johnson, Harold E., Worcester
Johnson, Robert E., Southbridge
Jones, Dudley P., Worcester
Jones, Louis A., Ashburnham
Jordan, Robert L., Worcester

Kahn, Jordan S., Worcester
*Kane, Phyllis E., Worcester
*Kane, William E., Worcester
Kaplan, George R., Brighton
Karazia, Ernestine V., Worcester
Karvonen, John W., Shirley
*Katte, Martin, Jr., Arlington, Va.
Keegan, Martin L., Jr., Worcester
*Keinard, Alvin S., Palmyra, Pa.
Kelley, Gerald J., Worcester
Kelly, James A., Jr., Worcester
*Kelly, Lenore M., Brockton
Kern, Joseph W., New Britain, Conn.
Keyes, Robert J., Worcester
King, Bettye M., Spencer
King, David S., Sutton
Knowles, Robert M., Worcester
Knox, Roy I., Leicester
*Korsun, Charles J., Worcester
*Krecioch, Eugene R., Fall River
*Krock, Beverly R., Worcester

Laffey, John E., Worcester
*Lally, John F., Worcester
*Lambert, Christy D., Worcester
*Lapinskas, Aldonna, Worcester
*LaPlante, Bernard J., Worcester
Larson, Alden A., Shrewsbury
Laska, George, Worcester
Lazour, James, Worcester
Leavitt, Milton, Worcester
LeBlanc, Corinne P., Gardner
LeClair, Edward E., Jr., Southbridge
Lekas, Mary D., Worcester
Lemire, Donald A., Worcester
Lennan, David R., Worcester
*Leone, Anthony D., Worcester
Lepore, Francis E., Clinton
Liard, Theodore J., Jr., Providence, R. I.
Liberty, Richard R., Worcester
*Little, Dana A., Brunswick, Me.
Ljungberg, Betty P., Worcester
Long, Harriet R., Buffalo, N. Y.
Lumb, Ralph F., Shrewsbury
Lynch, Thomas J., Worcester

*MacArthur, Kenneth C., Sterling
*Macdonald, Robert W., Schenectady, N. Y.
*MacGillivray, George C., Arlington
*Mahoney, Nora F., Worcester
*Marcus, Robert B., Pennington, N. J.
Marion, Raymond J., Spencer
Marsella, Robert A., Worcester
*Marsh, Donald W., Rutland
Marshall, John F., Brooklyn, N. Y.
Martel, Raymond J., Worcester
*Martin, Eleanor, Marlboro
Martin, William B., Jr., Ashburnham
Mason, Warren E., Worcester
Mauke, Otto R., Webster
*Maxwell, James W., Worcester
Maynard, Wentworth C., Jr., Worcester
McCauley, Donald F., Worcester
McDonald, John J., Hackensack, N. J.
McDonough, Thomas J., Worcester
*McGee, Fewer E., Worcester
*McKenna, George E., Leicester
*McMurtrie, John W., New York, N. Y.
*Meehan, Lawrence J., Worcester
Mensoian, Michael G., Jr., Worcester
Michelson, Stanley L., Worcester
Miller, Rex C., Goehner, Neb.
Minasian, Vasken, Worcester
Mitchell, Richard P., Worcester
Moberg, Wensel W., Fargo, N. D.
Modlinger, Ralph E., Worcester
Moffatt, Richard A., West Boylston
Mollo, Constantine D., Worcester
Morgan, Lewis W., Rochdale
Moriarty, Marion L., Worcester
*Morin, Gerald J., Fisherville
Morton, Beverly, Worcester
Moseley, William R., Worcester
*Moyer, C. Josephine, Reading, Pa.
Murawski, Benjamin J., Pittsfield
Murphy, Paul F., Worcester

Nanigian, Jacob, Paxton
Nason, Natalie E., Orono, Me.
Neary, Beatrice L,. Worcester
*Neilan, John P., Milford
Nelson, Roy S., Holden
Newlands, Joseph, Worcester
Nichols, Arthur W., Worcester
Niemiec, Leon J., Jamaica, N. Y.
Nims, Robert F., Auburn
*Nolan, Joseph E., Worcester
Noonan, Richard J., Worcester
*Noonan, Robert W., Worcester
*Noone, James J., Worcester
*Norton, James A., Jr., Worcester
*Nugent, Edward F., Auburn

Obremski, Edward, Worcester
O'Brien, Edward C., Worcester
O'Connor, Agnes M., Worcester
O'Connor, Lawrence S., Jr., North Brookfield
Ogilvie, Bruce C., South Portland, Me.
O'Grady, Margaret R., Worcester
Ohman, Howard L., Worcester
Olund, Paul H., Worcester
O'Malley, John J., Worcester
*O'Mara, Lucille F., Worcester
Orman, Sidney B., Worcester
Oudheusden, Frank P., Rye, N. Y.
Ozimek, Henry A., Suffield, Conn.

Palley, Melvin M., Worcester
Panaccione, Joseph J., Barre
Parker, Edward T., Whitinsville
*Parker, Fred W., Worcester
Peirce, Priscilla, Worcester
*Perham, Margaret F., Worcester

*Peterson, Eric L., Worcester
Pincus, Jack C., Brooklyn, N. Y.
*Pisinski, Henry J., Auburn
*Plante, Marguerite P., Boston
*Plotczyk, Raymond A., Westboro
Plucinski, Walter P., Worcester
Plummer, Franklin P., Silver Creek, N. Y.
Pope, Henry W., Jr., Worcester
Praglin, Julius, Boston
Pratt, Kenneth W., Leicester
Proctor, Robert M., Worcester
Puniskis, George J., Worcester
Putnam, Emmons W., Worcester

Quinn, Edward W., Worcester

*Raphaelson, Arnold H., Worcester
Reardon, William R., Worcester
Reddy, Martin M., New York, N. Y.
Rees, David J., Albany, N. Y.
Reilly, Joseph L., Worcester
*Retallick, Harold J., Eau Clair, Wis.
Reycroft, David G., Arlington
Ricciardi, Michele, Worcester
Riggan, Byron W., East St. Louis, Ill.
Riordan, James F., Worcester
Risley, Edward M., Springfield
Robbins, Ronald M., Worcester
Roberts, Arthur H., Worcester
Robie, Burton A., Fisherville
*Rogers, Donald S., Barre
Rolston, Glenn E., Jr., Worcester
Rosati, Flavio J., Worcester
Rosenbaum, Joseph H., Lowell
*Roussel, Henry N., Worcester
*Roycewicz, Stephen J., Worcester
Rubin, George, Brooklyn, N. Y.
*Ruggles, Chester W., Waltham
Rupkus, Ruth C., Worcester
Russell, Frank H., Jr., Worcester

*Sachs, Howard M., Bridgeport, Conn.
*Salo, Betty A., Barre
Samara, Joseph, Worcester
Sandberg, Richard P., Worcester
*Sanderson, John C., Worcester
Sandy, Catherine I., Shrewsbury
Sanford, William W., Starrucca, Pa.
*Savat, Constance S., Worcester
Schwartz, Martin, Worcester
*Shatikian, Khachatoor, Teheran, Iran
Shaub, Robert W., Clinton
*Shaw, John P., Conway, N. H.
*Shear, James A., Pittsburgh, Pa.
Sheehan, Francis P., Bridgeport, Conn.
Shimukonis, Frank J., Worcester
Shooshan, Charles H., Jr., Worcester
*Sibley, Edward A., Leicester
Sinclair, Edward E., Worcester
Singer, John J., Worcester
Sirk, Joel H., Worcester
*Sister M. Clarissima, Reading, Pa.
*Sister M. Gemma, Reading, Pa.
Skiddell, Harris, Chelsea
Skinner, Marguerite M., Worcester
Sleuman, Frank H., Jr., Worcester
*Smith, Ann M., Worcester
*Smith, James W., Worcester
Smith, Reginald J., Worcester
Smith, Richard S., Worcester
Sobol, John A., Worcester
Sonntag, George J., Jr., Worcester
Sootkoos, Alphonse C., Auburn
Southwick, Albert B., Leicester
Spagnolo, Leo P., Worcester
Spaulding, Norwood L., Worcester
Sperry, Herbert S., West Boxford
Squier, Dean F., Worcester
*Stacey, Karl, Manhattan, Kan.
Stanhope, Russell H., Worcester
Stasiewicz, Henry J., Worcester
Stewart, Milton, Worcester
Stock, Richard W., East Aurora, N. Y.
Stoneman, Elvyn A., Lincoln, Neb.
Stuebi, Theodore G., Jr., Springfield
Stupak, Ralph J., Worcester
Sullivan, Arthur F., Holden
*Sullivan, Edward P., Worcester
Swana, Michael R., Dudley
Swansburg, Edward F., Melrose
Swanstrom, Kenneth E., Worcester
Sweeney, Edwin A., Worcester
*Swenson, Richard W., Garden City, N. Y.
*Tasso, Andre J., Cairo, Egypt
Tatham, Lewis C., Rockland, Me.
Taylor, Richard A., Charlton City
*Theodore, Louise, Worcester
Thomas, Constantine, Lowell
*Thompson, Beverly A., Princeton
Thomson, Nicholas G., Worcester
Tibbetts, Raymond E., Worcester
Tite, Dorothy, Charlton City
Todd, Joseph R., Worcester
*Tomolonis, Anna H., Worcester
Trussell, Barbara, Worcester
Turner, Albert B., North Brookfield
Turo, Joseph A., Worcester
*Tuttle, Jean W., Worcester

Ullstrom, Paul E., Worcester

*Vamvas, Joanne H., Worcester
Vanderhoof, Irwin T., Boonton, N. J.
VanderPyl, Adrian W., Rutland
*Viens, Roger G., Worcester
Viglucci, Andrew T., Albany, N. Y.

Wahlberg, Bertil L., Worcester
*Warren, Charles H., Portland, Me.
Waters, Richard, Gardner
*Weinstein, Althea F., Worcester
Wetherbee, David K., Worcester
*White, Charles J., Worcester
White, David E., Southbridge
Wicks, Robert H., Worcester
Wilson, Martin C., Worcester
Witkowski, Florence J., Worcester
*Wolochowicz, Hedwig S., Worcester
Woolf, Martin D., Worcester
Woolson, Gloria D., Worcester
Wylie, William J., Jr., Feeding Hills

Zuk, Henry, New York, N. Y.
Zukowsky, Raymond J., Worcester

III. THOSE IN RESIDENCE LESS THAN ONE SEMESTER, 1948-49

NAME	CLASSIFICATION
Beahn, John Edward	51
Beauregard, Wilfred Gerard	52
Cahill, Henry Eugene	50
Cooper, Victor Alexander	52
Dugan, Robert Joseph	52
Guinette, Paul George	Ed g
Jolly, Hilda	G S
Kalashian, Sahag	52
Krecioch, Eugene Robert	50
Kubicki, Theodore Thomas	52
Lee, Shpresa	52
Lever, Harold Brandenburg	52
MacDuffie, Marbury	52
Merrill, Warner Jay, Jr.	Ph s
O'Connell, James Francis	51
O'Leary, Daniel Rockwood	50
Papadopoulos, Nicholas	Ec g
Sandy, Joan Jessie	52
Shooshan, Charles Harold, Jr.	H g

SUMMARY 1948-49

	Men	Women	Men	Women	Total
Undergraduates			653	244	897
Freshmen	178	57			
Sophomores	190	56			
Juniors	154	75			
Seniors	131	56			
Graduate Students			155	46	201
Special Students			11	8	19
Summer Term (1948)			413	87	500
Total			1232	385	1617
Less Duplications			203	48	251
Net Total			1029	337	1366
Candidate for B.Ed. degree				1	1
Auditors			3		3
			1032	338	1370

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Inquiry Blank

Correspondence should be addressed as follows:

Regarding admission to the college or to the summer term or as a special student, to the Dean of the College.

Regarding admission to the graduate school, to the chairman of the department in which the applicant is interested.

Applications should be filed as early as possible. *Unduly late applications may fail to receive consideration.*

Applications for admission in September should, so far as is possible, be filed at the end of the junior year and at the latest before March 1 of the senior year.

CLARK UNIVERSITY

REQUEST FOR "APPLICATION FOR ADMISSION" BLANKS

Name ....

(Last name) **(First name)** **(Middle name)**

Mail address ....

....

....

I am interested in admission to (please check below):

The men's college ....

The women's college ....

The graduate school ....

I am particularly interested in the department or division of:

....

I plan to enter (date) ....

Date of this application ....

CLARK UNIVERSITY

Fifty-ninth Annual Commencement

MAY 29, 1949

WORCESTER, MASSACHUSETTS

Order of Exercises

Processional
Allegro from Sixth Organ Sonata *Händel*

Invocation The Reverend Edmund Randolph Laine
Rector of St. Paul's Episcopal Church
Stockbridge, Massachusetts

Announcements by the President

Commencement Address Colgate Whitehead Darden, Jr
President of the University of Virginia

Conferring of Degrees

Benediction The Reverend Edmund Randolph Laine

Recessional
Maestro from Third Organ Sonata *Mendelssohn*

The audience will kindly remain standing during the recessional

Candidates for the Degree of Bachelor of Business Administration

Robert Arent Abeles
John Henry Anderson
Lauren Earl Baxter
Oliver Wendell Boch
John Peter Boxshus
Edward Cuthbert Camp, Jr
James Francis Cronin, Jr
Carolyn Anne Dolan
Sheila Veronica Donoghue
Lawrence Calvin Drury
Charles Waldo Ela
Anthony Joseph Femina
Samuel Julius Freelander
William Eldon Harris
Forrest Ivan Higginbotham
George Everett Holmes
Hagop Herach Jamgochian
Dudley Palmer Jones
Martin Leo Keegan, Jr
Robert Leo Kelleher
Milton Leavitt
Anthony Daniel Leone
Thomas Joseph McDonough, Jr
Robert Wells Menard
Stanley Lucius Michelson
Joseph John Panaccione
George John Puniskis
Edward William Quinn
Flavio Joseph Rosati
Ruth Cele Rupkus
Richard Stanley Smith
George Joseph Sonntag, Jr
Constantine Thomas
Joseph Anthony Turo
Charles Victor Vilandre

Candidate for the Degree of Bachelor of Business Administration with High Honor

Robert Harrison Carey *with High Honor in General Course*

Candidates for the Degree of Bachelor of Arts

Lloyd Byron Addington, Jr
Richard Francis Adrian
Sidney Agulnick
Richard Joseph Altobelli
Barbara Irene Antzes
John Joseph Archambault
Ralph Angelo Armenti
Ruth Joy Atwood
Stephen Hopkins Baker
Rodger Douglas Bernklow
Robert Wesley Bibeau
Syma Birnbaum
Geraldine Irma Blume
Mitchell Burton Booth
Stanley Melvin Boynton
Donald Logan Brigham
Patricia Virginia Bubar
Betty Elaine Bugbee
Therese Imelda Butler
Barbara Ann Callan
Ruth Eleanor Carlson
Janette Christie
Eleanor Anne Costello
Paul Romeo Cournoyer
Jack Burton Coyle
Thomas Harrison Coyle
Harold Ernest Crockett
Olive Louise Cross
David B. Davidian
Roberta Barratt Dobie
Kenneth Charles Dornes
Arthur Oscar Dryer
Albert Robert Elby
Wonna George Eliopoulos
Marion Frances Ericson
John Stanley Fipphen
Philip Brierly Fisher
Joan Marie Flaherty
James Charles French, Jr
Anna Loraine Frissora
Richard Edward Gardner, Jr
Barbara Mary Gearin
John Russell Golner
Harold Oliver Graves
Ann Talbot Guest
Russell John Gustafson
Nettie Thayer Gwynne
Richard John Haddad
Jean Barrow Harris
Peter Hartocollis
Harold Walter Hedberg
Helen Flygare Hortman
Jacob Cyrus Hortman, Jr
Mitchell Jaffe
Harold Jameson, Jr
Allan Wilbur Jewell
Phyllis Elaine Kane
David Hodgkins Kellogg
James Malcolm Kemp
David John Kneeland
Irene Rose Krajewski
Raymond Lloyd LaPierre
Francis Edward Lepore
Lorraine Theresa Leroux
Alfred Jacob Levy
Richard Robert Liberty
Betty Pauline Ljungberg
Norman Dale MacKay
Kathryn Lovejoy McCabe
John Joseph McDonald
Mary Elizabeth McGrath
Richard Andrew Moffatt
Gerald Joseph Morin
William Richard Moseley
Pauline Anne Murray
Barbara June Ostroff
Leonard Domenic Pagnotto
Melvin Mayer Palley
Catherine Ann Carswell Pallrand
Berend David Pannkuk
Daniel James Pappas
Edward Thomas Parker
Henry William Pope, Jr
Kenneth William Pratt
George John Puniskis
William Robert Reardon
Benjamin Victor Reed
David John Rees
George Rubin
Catherine Isabella Sandy

Candidates for the Degree of Bachelor of Arts (Cont.)

Millicent Jean Sanford
Bernard Schwab
Frank Joseph Shimukonis
Harris Skiddell
Robert Frank Slechta
Samuel Wallace Smith, Jr
Nathan Spungin
Gilbert Boynton Stewart
Theodore Grover Stuebi, Jr
Ralph John Stupak
Edward Freeman Swansburg
John Roy Thomson
Edmund Lincoln Tivnan
Joseph Robert Todd
Joanne Helen Vamvas
Ruth Anna Williams
Carol Wilson
Florence Joanne Witkowski
William James Wylie, Jr

Candidates for the Degree of Bachelor of Arts with Honor

Doris Gertrude Audette *with Honor in General Course and with Honors in Romance Languages*

Carl Butenas *with Honor in General Course*

Louis Peter Carini *with Honors in Psychology*

Norman Joseph Edinberg *with Honors in Economics and Sociology*

Aubyn Freed *with Honor in General Course*

Fred John Galanto *with Honor in General Course and with Honors in History and International Relations*

Charles David Goodman *with Honor in General Course and with Honors in Physics*

Robert Fried Green *with Honors in Economics and Sociology*

Irja Rachel Hofschire *with Honor in General Course and with Honors in German*

Dorothy Ann Johnson *with Honors in Chemistry*

Carolyn Knight *with Honors in Geography*

Ruth Beatrice Mancevice *with Honors in German*

Charles Willis Naas *with Honors in History and International Relations*

Robert Charles Plumb *with Honor in General Course*

Wendell Slayton Richardson *with Honor in General Course and with Honors in History and International Relations*

Candidates for the Degree of Doctor of Philosophy

Chemistry
Richard Blazo Martin
Edward Elliot Sinclair
John Jacob Singer, Jr

Economics and Sociology
John Fred Holly

Geography
Veva Kathern Dean
Mohamed Ibrahim Hassan

History and International Relations
Michel Brunet

Psychology
Milton Gershon Weiner

Conferring of Honorary Degrees

Samuel Nathaniel Behrman	Presented by Loring Holmes Dodd
Edmund Randolph Laine	Presented by Robert Stanley Illingworth
Charles August Kraus	Presented by Benjamin Shores Merigold
Francis Henry Taylor	Presented by George Leslie Stout
Harry Frank Guggenheim	Presented by Percy Martin Roope
Colgate Whitehead Darden, Jr	Presented by Vernon Jones

SPECIAL AWARDS

EDMUND C. SANFORD SCHOLARSHIP

Gerald Philip Loweth

PRENTISS HOYT PRIZE IN POETRY

First and Second Prizes awarded to Walter Edward Wells for the Poems "The Chance to Dream" and "Soirée"
Third Prize awarded to Beverly Jean Fox for her Poem "Bubbles"

ORDER OF AHEPA PRIZE FOR EXCELLENCE IN GREEK

John Waldo Karvonen

Candidates for the Degree of Bachelor of Arts with High Hon

Harold Charles Champeau *with High Honor in General Course*

Alfonso González *with High Honor in General Course and with Honors Geography*

Benjamin Joseph Murawski *with High Honor in General Course and wi Honors in Psychology*

Joyce Townsend *with High Honor in General Course*

Candidate for the Degree of Bachelor of Arts with Highest Honor

John Donaher Ryan *with Highest Honor in General Course and with Honors in Physics*

Candidates for the Degree of Master of Arts in Education

Malcolm Everett Baird
Carlton Foch Cormier
Robert Frederick Derosier
Raymond Bertil Hill
Paul Donald Malboeuf
Lester Ward Parker
Arthur Francis Sullivan

Candidates for the Degree of Master of Arts

Chemistry
Bernard Baum
Joseph Hans Rosenbaum

Geography
John Francis Foley
Howard Leon Green
Engbert Jan Coen Kiewiet de Jonge
Oliver Herman Laine
Aldonna Lapinskas
Bruce Crossan Ogilvie
Howard Leonard Ohman
Lewis Theodore Reinwald

Economics and Sociology
David Elliott White

History and International Relations
Doris Adeline Derby
George Robert Kaplan
Albert Norman
Clementine Patricia Razzo
Albert Brown Southwick

Psychology
Kenneth Ashton Chandler
Loren Orville Crain

CLARK UNIVERSITY

COMMENCEMENT EXERCISES

OF THE

1949 SUMMER TERM

AUGUST 26, 5:00 P.M.

PRELUDE: Prelude in D Minor	*Bach*
PROCESSIONAL: Trumpet Voluntary	*Purcell*

COMMENCEMENT ADDRESS
President Howard B. Jefferson

CONFERRING OF DEGREES

BACHELOR OF EDUCATION

Alice Brennan Larkin
Helen Louise Wright

BACHELOR OF BUSINESS ADMINISTRATION

Raphael Milton Feldman

Paul Robert FitzGerald

Louis Charles Gallo

Stuart Calvert Gibson

David Arthur Helm

Nelson Richards Hill

Vasken Minasian

Rolf Scott Tonseth

BACHELOR OF BUSINESS ADMINISTRATION WITH HONOR

William Aramony *with Honor in General Course and with Honors in Business Administration*

Albert Spero Hayeck *with Honors in Business Administration*

BACHELOR OF ARTS

James Emil Ballan
James Joseph Barrett, Jr
René Paul Beaudry
Florence Agnes Boudreau
Russell Erwin Byron
Arnold David Chase
Libro Ciani
Peter Elia Comalli, Jr
George Edgar Crickard, Jr
Richard Charles Daniels
Robert James Dean
Edward Joseph Desroches
George Nicholas Eliopulos
Willy Falk
Ruth Elizabeth Green
Gilbert Arlen Haberman
Martin Heller
William Thomas Higgins
Charles Carroll Hixon
Therese Mary Labenski
Mary Despina Lekas
John William McMurtrie
Michael George Mensoian, Jr
Esther Barbara Mero
Marion Louise Moriarty
Robert Ferdinand Nims
Agnes Mary O'Connor
Bradford Barrett Plue
Martin Matthew Reddy
David Gage Reycroft
Alan Lester Rosenberg
Francis Paul Sheehan
John Edward Tashjian
Bertil Lennart Wahlberg
Russell Howard Woessner

BACHELOR OF ARTS WITH HONOR

Lyndon E. Ginett *with Honor in General Course and with Honors in Psychology*

Jacob Carl Pincus *with Honor in General Course and with Honors in Economics and Sociology*

William Warren Sanford *with Honors in Biology*

BACHELOR OF ARTS WITH HIGH HONOR

Richard Paul Mitchell *with High Honor in General Course and with Honors in History and International Relations*

MASTER OF ARTS

In Chemistry

Alexis Adrian Babineau
Richard Carson Brown
William Butler Martin, Jr
Richard Waltner Swenson

In Economics and Sociology

Edward Emile LeClair, Jr
Walter Henry Zukowski

In Geography

Henry Lewis Buzzard
Ching Chieh Chang
John Andrew Sobol

In History and International Relations

Winnifred Morton Irwin
Anne Marie McBreen
Ann Marie Shaughnessy
Albert Bristol Turner

DOCTOR OF PHILOSOPHY

In Chemistry

Stanley Chaberek, Jr
Albert Edward Frost, Jr
Frank Henry Healey, Jr

In Economics

James Lennon Duffy

In Geography

Sherman Raymond Abrahamson
Lewis McElwain Alexander
Dorothea Edythe Burton
Robert Dale Campbell
Colbert Colgate Held
Alfred Rockwell Sumner
Roy Paul Terrell

In History and International Relations

Myron Adelbert Baskin
Charles Newton Brickley
Edward Stanley Costrell
Peter B. Schroeder

PROCESSIONAL: Andante from Second Organ Sonata *Mendelssohn*

ORGANIST: MR. H. EARLE JOHNSON

Following the Commencement Exercises President and Mrs. Jefferson will hold a reception at their home for the graduates, their families, faculty, guests of the University, and all students of the summer session.

CLARK UNIVERSITY

WORCESTER, MASS.

FOUNDER'S DAY ADDRESS

BY

DR. CHARLES A. KRAUS

FEB. 8, 1949

SOME PROBLEMS AT HIGHER EDUCATIONAL LEVELS

BY
DR. CHARLES A. KRAUS

FOUNDER'S DAY ADDRESS
FEB. 8, 1949

CLARK UNIVERSITY
WORCESTER, MASS.

SOME PROBLEMS AT HIGHER EDUCATIONAL LEVELS

By Charles A. Kraus

THIRTY-TWO years ago, it was my privilege to give the Founder's Day address at this University; I feel greatly honored to have been given the privilege of addressing you again. In the intervening years, many changes have taken place: we won one war, lost a peace, won another war and, today, a second peace still eludes us. These have been stirring times and they impress us with the rapidity with which momentous changes occur in all phases of life in this unsettled world.

On the earlier occasion, I discussed the future of science in America. Today, I wish to discuss some problems in the field of higher education.

Up to the beginning of the nineteenth century, the problem of providing the youth of the world with an adequate education was a comparatively simple one. While political and social conditions underwent a steady change, largely due to the invention of printing and the consequent diffusion of knowledge, in the main, the inter-relationships of human beings as they were affected by industry, agriculture and intercommunication, changed but little and slowly. One hundred fifty years ago, land communication, for example, had advanced but little over that which existed in the time of Julius Caesar. The outstanding developments in the interval were the introduction of gunpowder into warfare, which put an end to the feudal system, and the invention of the keel and the cask, which greatly extended the range of travel and exploration by sea. But the changes consequent on these developments came only slowly and each generation was able to adjust itself to existing conditions without finding it necessary to evolve new principles of conduct and action.

In those times, education consisted, essentially, in passing on from one generation to the next the knowledge which had been accumulated in the past. It was unnecessary to prepare a generation in the art of acquiring new knowledge nor was it necessary to teach each generation the art of adjusting itself to new conditions and experiences that followed in the wake of new knowledge.

Today, the problem of education is a much more difficult one. Not only has the stock of accumulated knowledge increased enormously over that of several hundred years ago, each generation must be prepared to meet new and entirely unforseeable conditions arising from new knowledge and its applications. Education must prepare the students' minds to grapple with the problems of life in a constantly and rapidly changing world, changes which, at any given time, cannot be foreseen. Our whole educational system requires fundamental revision at all levels in order that our youth may be better qualified for citizenship in an ever-changing world.

Early Development of Education in America

Time does not permit of an analysis of the problem of education in its broader aspects. I should like, however, to discuss briefly some present day problems of education at the higher levels.

To have an understanding of American higher education as it is today and to gain an insight into the nature of the problems confronting it, it is necessary to know something of the history of the development of education in this country. The earlier, as well as many of the later, liberal arts colleges were patterned after the colleges of the mother country. The English colleges were designed to provide training for men destined to serve Church or State and, in addition, to provide a considerable group of the leisure class with an acceptable cultural background. Considering the times, the English colleges provided a reasonably adequate curriculum which had sufficient flexibility to permit men of exceptional ability to develop their individual talents. In the American colonies, conditions differed greatly from those in England; there was no leisure class and opportunities for serving the State were limited; for the most part, the colleges served as training schools for the ministry. The Greek and Latin classes formed the backbone of the college curriculum, along with such subjects as ethics, logic, philosophy, the elements of mathematics and natural philosophy and various subjects appertaining to the ministerial vocation.

Failure of the Liberal Arts College

Up to the end of the 18th century, the college curriculum was not too seriously out of balance with the needs of the times. But, beginning with the nineteenth century, the colleges began to lose ground; the sciences, physical, biological and medical, which had been developing slowly but steadily since the time of the Renaissance, began to develop at a very rapid rate. At the same time, the results of science came to be used more and more in a practical way in new industrial developments. Thus, chemistry came to be applied extensively in the textile industry by the end of the 18th century, coal gas came to be used shortly thereafter as an illuminant, steam came into extensive use as a source of power early in the 19th century, electricity came to be used in communication before the middle of the 19th century as also did chemistry in its applications to agriculture.

Throughout the 19th century, the American liberal arts college remained blind to its opportunities as well as to its obligations; it turned a deaf ear to those that sought to make the college an instrument for the education of the nation's youth beyond the most elementary stage and it clung tenaciously to its scholastic traditions. The great advances in Europe in all fields of learning during the 19th century were all but ignored in America.

How sadly the liberal arts colleges failed in meeting the needs of the youth of the day is illustrated by their failure to produce outstanding men of science up to the end of the 19th century. Let us consider the outstanding figures in physical science—and they were men renowned the world over. Here we have: Benjamin Franklin, who had barely a common school education; Benjamin Thompson, Count Rumford, who had no college education; Joseph Henry, a graduate of Albany Academy; Henry A. Rowland, a graduate of the Rensselaer Polytechnic Institute; and Albert A. Michelson, once on the staff of the Physics Department of Clark University, a graduate of the Naval Academy. Among the graduates of liberal arts colleges, only one, J. Willard Gibbs, a graduate of Yale College, achieved distinction. I shall return to Yale and Willard Gibbs presently.

How comes it that among the six men who achieved great distinction only one was a graduate of a liberal arts college? Throughout the period of which I am speaking, the liberal arts colleges were preponderant in number as well as in resources. During the 19th century, many graduates of liberal arts colleges went abroad for training in the sciences; yet, they failed to make outstanding contributions in their fields. It would seem, would it not, that, not only did the colleges fail to provide the students of science with an adequate preparation for further study, they actually quenched that spark of originality without which great achievement is unrealizable. Would Franklin and Thompson and Henry have made their great contributions to science if they had gone to Harvard or Yale? Rowland, fortunately, was unsuccessful in entering any liberal arts college because he could (or would) not meet the entrance requirements in Greek and Latin. Michelson never attempted to enter a college; he went directly to the Naval Academy and at the age of 26, with meager facilities, made a determination of the velocity of light which brought him world wide recognition. Would Rowland and Michelson have achieved distinction if they had gone to the liberal arts colleges of their day?

Origins of Universities in America

There were always men in the colleges who recognized the inadequacy of the then existing curricula. Minor changes and adjustments were made, usually at the instance of forward-looking college presidents rather than at that of their faculties. Up to the end of the 19th century, the American colleges were the most conservative and tradition-ridden institutions in our social structure. In the end, it was not the colleges or, so-called, universities, that took the initial step in introducing education at a higher and necessary level; it was American industrialists, men of vision, who lived outside the growth-inhibiting atmosphere of the American colleges, who founded institutions of a new type which were unhandicapped by the traditions of scholasticism.

Here we have a succession of great men: Joseph E. Sheffield, Johns Hopkins, Jonas Clark and John D. Rockefeller. It was these men who established higher education in America with the aid of such broad-minded and farseeing educators as: Benjamin Silliman, Daniel C. Gilman, G. Stanley Hall and William R. Harper.

The beginning of higher education in America goes back to Benjamin Silliman, Professor of Chemistry at Yale University, who, with his collaborators, succeeded in introducing graduate courses in the sciences at Yale as early as 1848. Initially, these courses were not included in the Yale College curriculum and the venture was not financed by the College. Somewhat later, Joseph E. Sheffield, the industrialist, became interested in this development; he provided financial aid, and, by 1858, the Sheffield Scientific School, a graduate school in the sciences and engineering, was launched. It is interesting to note that Willard Gibbs entered this school and received his doctorate in 1863, writing a thesis on the subject: "On the Form of the Teeth of Wheels in Spur Gearing". Does not this early association of Gibbs with men of advanced ideas regarding science education account for the fact that he is the one and only liberal arts college graduate, prior to 1900, who achieved great distinction?

Given favorable soil, a fertile seed, once planted, grows and multiplies. We can trace the development of higher education in this country all the way from the Sheffield Scientific School up to the present time. For nine years, Daniel C. Gilman was associated with this school as Professor of Political and Physical Geography. After three years as President of the University of California, he was called to Baltimore to launch the newly established Johns Hopkins University. The principles underlying higher education which had been elaborated at the New Haven institution were now put into practice under favorable conditions and with instant success.

Success of the Early Ventures

This success was in no small measure due to a small group of highly gifted young men whom Gilman gathered around him. At the time, it was the common practice for American institutions to recruit their faculties from among their own graduates; thus, they limited their field of selection and failed to secure the best talent. Gilman combed the country for talent and even went abroad in some instances. Another factor that contributed to the success of Johns Hopkins was that it drew its students from different colleges the country over. Other institutions, up to that time, drew their graduate student body almost entirely from among their own graduates.

Johns Hopkins was followed by Clark which, in turn, was followed by Chicago. In both instances, the faculties were selected country-wide, although some of the Clark staff came from Johns Hopkins and a large part of the Chicago staff came from Clark. Clark, at the time, had no undergraduate school, and hence drew its graduate student body from colleges throughout the country. Chicago established an undergraduate school, but, initially, drew its graduate student body from other institutions and later continued to draw a large proportion of its graduate student body from without. There is good reason for believing that the success of these early ventures in higher education was in no small measure due to the fact that inbreeding was impossible. The frequency with which present day graduate schools draw upon their own graduates for students and staff is a handicap in many instances and a source of weakness in our higher educational structure.

Transition from College to University

The instant success of Johns Hopkins, Clark and Chicago, proved to the world that America possessed the talent necessary for carrying out education and research at the highest level, comparable to the best in Europe. It showed, also, that talented men could carry on research while, at the same time, functioning as effective and inspiring teachers.

When Johns Hopkins University was founded in the seventies, the need for education at higher levels was apparent to well informed educators but they found it difficult to overcome the traditions and the provincialism of the institutions with which they were associated. However, the success of the ventures at Baltimore, Worcester and Chicago was such that the older and stronger colleges began to develop graduate schools and to provide instruction of a more advanced type than had theretofore been given in the colleges. At the same time, they began to give some encouragement to research.

With the turn of the century, graduate schools were established in many of the older colleges or universities as well as in numerous of the State supported educational institutions. The founding of research institutes, such as the Geophysical Laboratory, the Mt. Wilson Observatory and the Rockefeller Institute for Medical Research, did much to bring research to the attention of the informed public. However, it was World War I which disclosed the inadequacy of our educational system and which finally opened the eyes of the nation to the danger of the continued neglect of higher education, particularly in the sciences and their application.

With the end of World War I, there was a great increase in the number of students at the graduate as well as the undergraduate level. Research in the universities was expanded and promoted and industry woke up to the need for research in the applied field. The upswing in research and advanced instruction was greatly promoted by the Postdoctoral Fellowships of the National Research Council in the physical, biological and medical sciences, which were sponsored by the Rockefeller Foundation. These fellowships enabled the most talented Ph.D. graduates of the country to spend several years at institutions in this country or abroad in carrying on independent research and in familiarizing themselves with the latest developments in their fields of interest. By the thirties, American science had become measurably self-sufficient and able to carry its share of the load in the advancement of world science. How effectively this was done is best shown by the success of American science during World War II.

Defects in Present Day College Instruction

The complexity and the character of our social and economic structure are constantly changing and these changes bring with them new needs and new problems. I have not the time, if I had the ability, to analyze the present educational situation. I venture, however, to discuss several problems that seem pertinent on this occasion.

The liberal arts college today, as in the past, is the chief source of students for our graduate schools. The number of such students has increased greatly in recent years and the fields in which they are seeking further training have multiplied.

American liberal arts colleges have at no time provided students with a proper training for advanced study in the sciences. The curricula have been so adjusted that the student, lacking the proper foundation in collateral subjects, has taken an undue number of courses of an elementary nature in his field of special interest. Present day college curricula are in many respects inferior to those of fifty years ago. The student finds it more difficult now than then to begin laying the foundation for the study of the more advanced phases of his subject. Present day curricula require the student to spend the first two years of college in taking elementary or introductory courses in nearly all subjects: mathematics, philosophy, the humanities, the social and political sciences and the natural and physical sciences. While such a presentation of subjects may be desirable in some fields, it precludes a proper preparation for science students. College curricula should have sufficient flexibility so that they could be adjusted to meet the needs of particular subjects and of individual students.

The statement is frequently made that this is the age of specialization, particularly in the sciences. Nothing could be farther from the truth; its common acceptance by otherwise well informed persons shows how little the problems of modern education are understood. In the sciences, this is the age of generalization and integration. Matter is subject to the same laws, whether animate or inanimate, whether in the remote galaxies or in the nuclei of atoms. More and more we find that the great advances of science are being made in border fields. Modern medicine, for example, draws on physics, chemistry, biology, psychology and mathematics. While any given investigation is of necessity a specialized undertaking, it is planned, carried out and interpreted in the light of the knowledge of the whole of science. The detailed study of special fields in the sciences cannot be carried out advantageously on the basis of a four-year college course; it is first necessary to provide a broad foundation in allied subjects. Thus, in chemistry, in addition to sound training in certain advanced topics in mathematics, the student requires courses of an advanced nature in physics and, at times, in biology. In order to study the more advanced subjects in chemistry, as well as in allied sciences, it is necessary for the student to be grounded in the underlying elements of these subjects, as well as in mathematics. If a student in the sciences is to be prepared to proceed successfully to the study of the more advanced phases of any science, he must begin to lay the necessary foundation at the earliest possible moment.

If this is done, the student can find time for cultural courses in the last two years of college, rather than in the first two years. This has the further advantage that in the last two years, he is more mature and better qualified to appreciate subjects lying outside his field of primary interest. Breadth of training and breadth of view are indispensable to the educated man, but this implies breadth not only in fields without those in which he is primarily interested but also breadth with respect to his own and collateral fields.

In my judgment it would be possible to set up a curriculum adapted to the needs of science students which would provide them with the necessary contacts with fields of thought other than those relating to science. It would be a great help if our secondary schools sent students to college adequately prepared in two or more foreign languages. Along the same line of thought, it would be a great help to students in graduate school if they came well prepared in two or more languages, in which case, our graduate schools could abandon the language examinations that are now generally required.

Problems at the Graduate School Level

I cannot conclude my discussion without touching upon certain conditions that obtain in many of our graduate schools today. The tendency in recent years has been to multiply the number of graduate students in departments of certain institutions beyond the capacity of their physical facilities or of their research staffs. There are departments in which the number of graduate students is in the hundreds and there are instances where one staff member supervises the researches of thirty or more graduate research workers. There are also institutions in which graduate students undertake no research work until they have spent as much as two years in doing nothing more profitable than taking courses. The passing of examinations, rather than the successful completion of a significant research program, has become the criterion for the Ph.D. degree.

All this is bound up with the extraordinary increase in the number of students in undergraduate courses. There are instances where as many as four thousand students are registered for a single elementary laboratory subject. To provide for the instruction of such large classes, graduate assistants are of necessity employed, for these institutions do not have the funds with which to pay for the employment of well trained teachers. These graduate assistants, as they are called, often work for a mere pittance; they expect compensation by way of an advanced degree. In numerous instances, students complete their work for the doctorate without ever having had as much as a year to devote to their researches, free from the drudgery of assisting in undergraduate laboratories. At times, too, the hourly load of assisting, correcting notebooks and examination papers is unduly heavy. The great increase in the number of undergraduate students, following World War II, has led to an undue expansion in many graduate schools, the need for graduate assistants has been imperative and the standards of selection have been lowered. Altogether, the state of our graduate schools, at least in certain departments, is not encouraging at this time.

A Challenge

What is needed in this country today is more small graduate schools. Unfortunately, while the State universities are establishing and expanding their graduate schools rapidly, our liberal arts colleges, many of them well endowed with excellent physical facilities, are lagging behind; they have failed to realize that in the modern world the time has passed when four years of college is sufficient to supply the nation with the trained manpower that our complex civilization requires.

It is not necessary that an educational institution should carry on graduate work and research in all departments, nor is it necessary that in a given department it should carry on research in all branches of a field. It is not the number of papers published nor the number of students graduated that gives an institution standing—it is the quality of the product that counts.

There has been a distinct tendency in recent years for certain institutions to concentrate in one place an undue proportion of the available talent in a given field. From the point of view of the best interests of the country at large, this is undesirable. What the country needs is the widest possible dispersal of talent under conditions where it can give itself expression and have influence on the greatest number of the oncoming generation. In general, it is one man that makes a department. We have such examples as Rowland and Remsen, at Johns Hopkins, Michelson and Nef, at Chicago, and many more. These men, who achieved great things and who inspired scores of younger men, did this single-handed. They could not have done this had they had such numbers of students that they lacked personal contacts.

At the present moment this country is greatly in need of more graduate schools, smaller graduate schools and greater opportunity for contact between students and those who direct them and better conditions under which graduate students may carry on research.

A Future for Clark University

In conclusion, may I now touch on a matter nearer home and one nearer to my heart. Clark University has behind it a record of splendid accomplishments that goes back to the beginning of the present era in higher education in this country. In a few short years of prosperity, it achieved great distinction; in the succeeding years of adversity, Clark University continued to make notable contributions to knowledge. Witness Arthur Gordon Webster, who made many advances in physical science and whose treatises on mathematical physics are classics today the world over; and Robert H. Goddard, who laid the foundation of modern jet propulsion. Clark University may well take pride in its record of achievement and therein find encouragement for the future.

I recently had occasion to read President Jefferson's Report to the Board of Trustees in which he outlined plans for the future. Assuredly, today, when so many graduate schools are over-populated, there is an opportunity for Clark University to continue its pioneering in the field of higher education; it may well set an example to other New England colleges which, thus far, have shown little initiative in recasting their educational programs to meet the needs of the world of today. Clark University warrants the wholehearted support of the country at large as well as that of the community in which it is located.

CLARK UNIVERSITY

BACCALAUREATE SERVICES

In Atwood Hall

May Twenty-ninth, Nineteen Hundred and Forty-nine

At Ten O'Clock

PROGRAM

Prelude
Toccata per l'Elevazione — *Frescobaldi*
Chorale Prelude — *Bach*

Processional
Trumpet Tune and Air — *Purcell*

Invocation — President Howard B. Jefferson

Scripture Reading — President Howard B. Jefferson
Amos 5:14-24
Micah 6:6-8

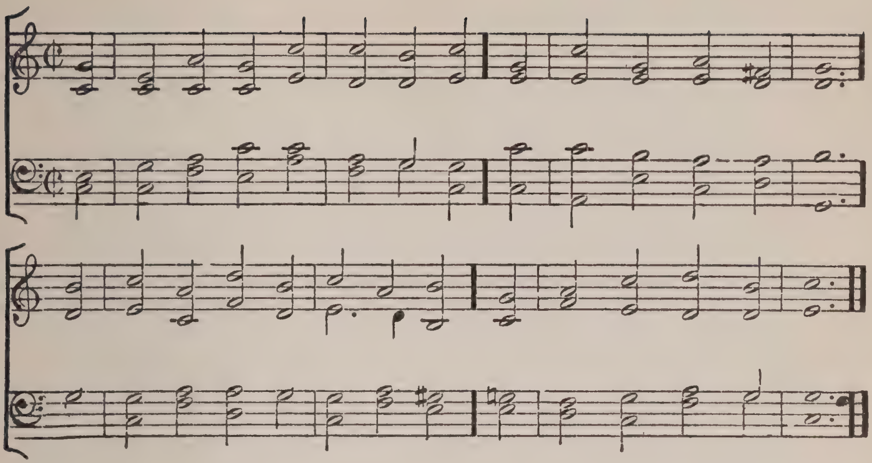
Hymn—St. Anne

Sermon
"The Mother's Recompense"
The Reverend Edmund Randolph Laine

Hymn—Old Hundredth

Benediction — The Reverend Edmund Randolph Laine

Recessional
Voluntary — *Purcell*



ST. ANNE C.M.

O God, our help in ages past,
  Our hope for time to come,
Our shelter from the stormy blast,
  And our eternal home.

Under the shadow of Thy throne
  Thy saints have dwelt secure;
Sufficient is Thine arm alone,
  And our defense is sure.

Before the hills in order stood,
  Or earth received her frame,
From everlasting Thou art God,
  To endless years the same.

A thousand ages in Thy sight
  Are like an ev'ning gone;
Short as the watch that ends the night.
  Before the rising sun.

O God, our help in ages past,
  Our help for time to come,
Thou art our guide while ages last,
  And our eternal home.

Isaac Watts

(St. Anne is taken from the famous "Worcester Collection,"
printed in this city by Isaiah Thomas in 1786.)

OLD HUNDREDTH L.M.

Be Thou, O God, exalted high,
  And as Thy glory fills the sky,
So let it be on earth displayed,
  Till Thou are here and now obeyed.

(Old Hundredth is the only hymn popularly surviving today from the "Bay Psalm Book," the first book printed in America, at Cambridge in 1640)

Organist: Mr. David Fuller

The audience is requested to stand while the procession leaves the hall

CLARK UNIVERSITY

COMMENCEMENT EXERCISES
OF THE
1949 SUMMER TERM

AUGUST 26, 5:00 P.M.

PRELUDE: Prelude in D Minor	*Bach*
PROCESSIONAL: Trumpet Voluntary	*Purcell*

COMMENCEMENT ADDRESS
President Howard B. Jefferson

CONFERRING OF DEGREES

BACHELOR OF EDUCATION

Alice Brennan Larkin
Helen Louise Wright

BACHELOR OF BUSINESS ADMINISTRATION

Raphael Milton Feldman

Paul Robert FitzGerald

Louis Charles Gallo

Stuart Calvert Gibson

David Arthur Helm

Nelson Richards Hill

Vasken Minasian

Rolf Scott Tonseth

BACHELOR OF BUSINESS ADMINISTRATION WITH HONOR

William Aramony *with Honor in General Course and with Honors in Business Administration*

Albert Spero Hayeck *with Honors in Business Administration*

BACHELOR OF ARTS

James Emil Ballan
James Joseph Barrett, Jr
René Paul Beaudry
Florence Agnes Boudreau
Russell Erwin Byron
Arnold David Chase
Libro Ciani
Peter Elia Comalli, Jr
George Edgar Crickard, Jr
Richard Charles Daniels
Robert James Dean
Edward Joseph Desroches
George Nicholas Eliopulos
Willy Falk
Ruth Elizabeth Green
Gilbert Arlen Haberman
Martin Heller
William Thomas Higgins
Charles Carroll Hixon
Therese Mary Labenski
Mary Despina Lekas
John William McMurtrie
Michael George Mensoian, Jr
Esther Barbara Mero
Marion Louise Moriarty
Robert Ferdinand Nims
Agnes Mary O'Connor
Bradford Barrett Plue
Martin Matthew Reddy
David Gage Reycroft
Alan Lester Rosenberg
Francis Paul Sheehan
John Edward Tashjian
Bertil Lennart Wahlberg
Russell Howard Woessner

BACHELOR OF ARTS WITH HONOR

Lyndon E. Ginett *with Honor in General Course and with Honors in Psychology*

Jacob Carl Pincus *with Honor in General Course and with Honors in Economics and Sociology*

William Warren Sanford *with Honors in Biology*

BACHELOR OF ARTS WITH HIGH HONOR

Richard Paul Mitchell *with High Honor in General Course and with Honors in History and International Relations*

MASTER OF ARTS

In Chemistry

Alexis Adrian Babineau
Richard Carson Brown
William Butler Martin, Jr
Richard Waltner Swenson

In Geography

Henry Lewis Buzzard
Ching Chieh Chang
John Andrew Sobol

In Economics and Sociology

Edward Emile LeClair, Jr
Walter Henry Zukowski

In History and International Relations

Winnifred Morton Irwin
Anne Marie McBreen
Ann Marie Shaughnessy
Albert Bristol Turner

DOCTOR OF PHILOSOPHY

In Chemistry

Stanley Chaberek, Jr
Albert Edward Frost, Jr
Frank Henry Healey, Jr

In Economics

James Lennon Duffy

In Geography

Sherman Raymond Abrahamson
Lewis McElwain Alexander
Dorothea Edythe Burton
Robert Dale Campbell
Colbert Colgate Held
Alfred Rockwell Sumner
Roy Paul Terrell

In History and International Relations

Myron Adelbert Baskin
Charles Newton Brickley
Edward Stanley Costrell
Peter B. Schroeder

PROCESSIONAL: Andante from Second Organ Sonata *Mendelssohn*

ORGANIST: MR. H. EARLE JOHNSON

Following the Commencement Exercises President and Mrs. Jefferson will hold a reception at their home for the graduates, their families, faculty, guests of the University, and all students of the summer session.

Rec'd from PRINTER, 10-13-49

RULES AND PRACTICES
OF INTEREST TO MEMBERS OF THE FACULTY

CLARK UNIVERSITY

WORCESTER, MASSACHUSETTS
1949

This pamphlet has been prepared in the hope that it will reduce the number of occasions when a member of the Faculty will be forced to say—"I didn't know that such a regulation existed."

An attempt has been made to cover broadly the entire range of topics on which information is likely to be needed by an individual as a member of the Faculty.

The University Catalog should be consulted for further details.

Official minutes of the Faculty and of other rule-making bodies may be consulted at the General Office, where a topical index is maintained. This is a particularly useful source of information for members of committees which are considering changes in University regulations.

For any errors or omissions the undersigned should alone be held responsible.

September, 1949. C.E.M.

ABSENCE.

1. Of a member of the Faculty.

   Absence from officially scheduled appointments for two consecutive days should be announced in advance, if possible, and notice should be given to the General Office.

   For longer periods of absence, permission should be secured in advance from the President of the University.

2. Of a graduate student.

   In general it is expected that a student will be regular in attendance throughout any academic term for which he is registered for courses in the University.

   Absence of a graduate student from his University duties is a matter to be arranged between the student and his major department.

3. Of an undergraduate.

   a. Absences from class or laboratory exercise.

   All such absences, regardless of the cause or circumstances, should be reported daily to the Recorder's Office. Blank forms are provided for this purpose and a box in which reports may be deposited is located near the Faculty mailboxes.

   One or more tardinesses may be reported as an absence at the discretion of the instructor.

   Any essential part of the work in any course which may be missed because of absences must be "made up" in the manner prescribed by the instructor. If this is not done, the instructor is authorized to report the course as "failed."

   Absences are classified in the Recorder's Office as "excused" or "unexcused" under explicit Faculty rules.

   More than 5 unexcused absences in a single course during one semester, or more than 15 in all courses of a five-course program involve a loss of credit which a student has earned toward a bachelor's degree.

   b. Absence from final examination, except in case of sickness or other unavoidable cause, normally results in a record of "failure" in the course.

   c. Absences from assembly and from required physical training are regulated under special rules.

ABSTRACT of dissertation or thesis. See Doctor of Philosophy and Master of Arts.

ACADEMIC COUNCIL. See Organization and Administration.

A standing committee of the Faculty with special functions relating to the Colleges.

ACADEMIC FREEDOM. The issue of "academic freedom" affecting a member of the faculty has never been a source of open controversy at Clark University. In general the Faculty and the administration have been guided by the spirit of the principles advocated by the American Association of University Professors and published in the Bulletin of the Association, Bull. XXX1, 116-119. The Faculty, the Administration and the Trustees are on record as approving, in principle, this statement of mutual duties and responsibilities.

ACADEMIC HISTORY of a candidate for a graduate degree. Such a history, in prescribed form, is required with each copy of the dissertation or thesis and with each copy of the abstract.

ACADEMIC YEAR. See Calendar.

ACCELERATED PROGRAM. Explicitly, a college program adopted because of the war and in effect for a number of years following 1942, which was designed to permit the completion of the requirements for a bachelors degree in three calendar years. The program included a twelve-week summer term and reduced to 19 the number of courses required.

More generally, any one of a variety of plans involving summer terms and/or heavier-than-normal programs of courses during the regular academic year, which enable a student to shorten the time between admission to the college and the completion of the requirements for a bachelors degree.

ACTIVITIES. Organized extra-curricular activities in the colleges are in part supported by the activities fee.

Athletic activities are under the immediate supervision of the Athletic Board. The Faculty Committee on Athletics has authority to revise or to veto decisions of the Board.

Non-athletic activities are in general managed by the students with the assistance of a faculty counselor for each activity.

Participation in organized activities is denied only when it appears that continuance in the activities might result in academic failure.

No social or athletic activity which requires formal approval may be scheduled in any semester after the last Wednesday preceding the final examination period.

ACTIVITIES FEE, a fee collected from undergraduates along with tuition and used to subsidize student activities.

Part-time students do not pay this fee.

Special students pay this fee only when they enroll in programs of four or more courses.

ADMINISTRATION. See Organization and Administration.

ADMISSION TO CANDIDACY for a degree. See Doctor of Philosophy, Master of Arts, etc.

ADMISSION TO THE UNIVERSITY.

(1) Admission to the Graduate School. Prospective candidates for graduate degrees and other mature persons with the necessary educational background may be admitted by the Graduate Board on the written recommendation of a department.

Applicants are advised, and may be required, to submit records of performance in Graduate Record Examinations in addition to the usual academic records.

Admission to the Graduate School does not in any way imply admission to candidacy for a graduate degree.

(2) Admission to the Undergraduate School. The Committee on Admissions of the College Board has charge of admissions to the colleges.

Fifteen certified units of acceptable preparatory school work are required for admission without "conditions". One or two conditions may be allowed. No one is admitted with fewer than thirteen certified units, or the equivalent.

The subjects required for admission to the Bachelor of Arts program differ from those required for the program in Business Administration.

Detailed requirements will be found in the current university catalog.

Admission with advanced standing toward a bachelor's degree may be granted to an applicant who has attended another institution of college grade. In such cases the class rating and the amount of credit which may be transferred are determined provisionally—subject to revision after a period of residence.

(3) Admission of Special Students. A person who wishes to take advantage of the educational opportunities offered by the University, but who does not wish to become a candidate for a degree, may be admitted as a special student with the important exception that anyone who holds a bachelor's degree and who wishes to attend graduate courses must apply for admission to the Graduate School.

Special students are admitted by the Committee on Admissions of the College Board.

(4) Auditors may be admitted to specified courses on the recommendation of the instructors concerned and on payment of regular tuition charges. Auditors do not pay the matriculation fee.

ADVANCED STANDING. See Admission.

ADVISER FOR STUDENT ORGANIZATION. See Counsellor.

ADVISER FOR COLLEGE STUDENT. When a student is admitted to the college he is assigned to a faculty adviser who serves in general as his counsellor and assists him in making up his program of studies.

The Adviser's signature is required on the student's program before he is permitted to register, and on any petition for special action which he may wish to present to the College Board.

A student may have his adviser changed by application to the Dean.

Ideally the adviser relationship ripens into friendship which endures after the student has graduated from the College.

When a student is accepted as a candidate for departmental honors, a member of the department becomes his "honors adviser." The honors adviser has general supervision over the student's honors program.

ADVISORY BOARD of the Women's College. A body composed of representative Worcester women, alumnae and representatives of the Faculty Women's Club. Its function is to advise the administration on matters of general policy for the Women's College.

AID. Student aid. See Fellowships and Scholarships and Loans.

Aid for graduate students is available in the form of special grants from a number of funds which are listed in the University catalog.

AMERICAN ASSOCIATION OF UNIVERSITY PROFESSORS. There is a local chapter of the Association at Clark University.

ANNUAL HONORS. See Honors.

ANNUITY. Retirement annuity. See Retirement.

APPOINTMENTS AND PROMOTIONS are made by the Trustees on the recommendation of the President. The President normally receives recommendations from the departments which are concerned and consults with the Committee on the Personnel and Organization of the Departments before making his recommendations.

ART MUSEUM. The Worcester Art Museum. Close cooperation is maintained between the educational department of the Museum and the University.

Graduates of the Museum School may be admitted to candidacy for the A.B. degree with advanced standing.

Certain college courses meet at the Museum and make use of material in its collection. For some of these courses there is a special fee in addition to the regular tuition.

ASSEMBLY. Attendance at a weekly assembly is required of all regular students in the college. Special regulations apply to absences from assembly.

Assembly attendance is not required of part-time students or of special students.

ASSIGNMENT OF ROOMS for class meetings is done by the Recorder in consultation with the instructors concerned.

ASSISTANCE by fellows and scholars. See Fellowships, Scholarships, etc.

ASSISTANT PROFESSOR. See Professor.

ASSISTANT TREASURER. See Organization and Administration.

ASSISTANTS. Student assistants are appointed by the President on the recommendation of the departments. Assistants perform a variety of services with stipends to correspond.

ASSOCIATE PROFESSOR. See Professor.

ATHLETICS. The Committee on Athletics of the College Board has control of athletic activities in the College.

General planning and direction of these activities, subject to approval by the committee, rests with the Athletics Board consisting of the Director of Physical training, the Committee on Athletics and and the Athletic Council. The Athletic Council consists of the captains and the managers of the various teams.

The Director of Physical Training has charge of the administration of the college requirements in physical training and also of the general program in athletics.

Schedules of games for inter-collegiate athletics require the approval of the College Board.

No athletic activity which requires formal approval may be scheduled after the last Wednesday preceding the final examination period.

Participation by a student in intercollegiate athletics is subject to rules for eligibility.

Athletic activities are supported in part by the "Activities Fee."

AUDITOR.

1. Persons who are not students in the University may be permitted to attend certain courses as "auditors."

The permission of the instructor is required in each instance and a fee equal to the regular tuition charge must be paid.

Auditors are not required to pay the matriculation fee.

2. Students in the University may be permitted to register as "auditors" in courses in which no credit is desired.

Courses which are "audited" are counted on the same basis as courses taken for credit, in determining tuition charges.

An auditor is not responsible for study assignments, test, etc. No records of performance or of attendance are kept for auditors.

AVERAGE GRADES. A student's average grade is computed on the basis of equal weights for the grades in each course and equal steps between the successive grades A+ , A, A-, B+ etc. to D-, with a double step between D- and F (failure). E.g. A Record in five courses of B, B-, C-, D and F would yield an average grade of C-.

Average grades for a semester or for other periods of time, especially for the entire period of residence (cumulative averages) are used in the administration of various college regulations.

A student's rank in his college class is based on his cumulative average grade.

BACHELOR'S DEGREE. The University currently grants the degrees of Bachelor of Arts and Bachelor of Business Administration.

The two degrees have materially different subject matter requirements. Change of candidacy from one degree to the other involves changes of program which demand careful attention and may involve a loss of credit.

The degree of Bachelor of Education, based chiefly on extension courses, has been in abeyance for several years, except in the case of students previously enrolled.

The degree of Bachelor of Science in Nursing was offered between May, 1944 and August, 1946.

The College Board is responsible for the administration of the requirements for the bachelor's degrees.

GENERAL REQUIREMENTS which apply to both the A.B. and the B.B.A. degrees.

1. Residence. Not less than three academic years of college study in residence. At least one full year and usually the last year before the degree is conferred must be spent at Clark University.
2. Course requirements. Twenty courses in addition to required physical training, except in the case of "veterans" for whom the normal requirement is nineteen courses.

Courses in which the grades are D-, D or D+ are not accepted for more than one-fourth of the total of courses in which grades are recorded.

Requirements 3 and 4 are in addition to the course requirements as stated above.

3. Physical training. Three years of physical training, two hours per week. Veterans are excused from this requirement.
4. Assembly. Attendance at a weekly assembly is required.

BACHELOR OF ARTS DEGREE. Subject matter requirements.

5. A major, i.e. at least seven courses officially approved as constituting a major.
6. English.
   a. A course in the freshman year and an additional half-course.
   b. Satisfactory proficiency in the use of English.
7. Fine Arts or Music. A half-course chosen from an approved list.
8. Foreign Language.
   a. One course in the freshman year.
   b. One course at or beyond the level of a third year college course
      This may be the course taken in the freshman year.
9. Group A. Two courses, one of which must be a laboratory course.
10. Group B. Two courses.

BACHELOR OF BUSINESS ADMINISTRATION DEGREE. Subject matter requirements.
In addition to the general requirements which apply to both degrees, a candidate for the B.B.A. degree must:

a. Complete a group of courses in Business Administration which are required of all candidates.
b. Complete an "integrated program" of at least five courses in some special area of concentration.

"BOHEMES." Informal dances conducted by the college students at intervals throughout the college year.

BOOK STORE. The University Book Store is operated by the University for the convenience of students and Faculty. It provides facilities for ordering text books and supplies in advance of the opening of the semester in which they will be needed.

BUDGET, departmental. See Departments.

BUILDINGS and GROUNDS. See the University Catalog.

BULLETIN. Clark University Bulletin. See Publications, University.

BULLETIN BOARD. The general University bulletin board near the Woodland Street entrance to Jonas G. Clark Hall, and the Faculty bulletin board, near the Faculty mail boxes should be watched for miscellaneous notices.

BURSAR. The bursar is the agent of the Treasurer of the University for the collection of tuition and other student obligations, for the execution of departmental purchases and the accounting in connection with departmental appropriations, and other related services.

BUSINESS ADMINISTRATION. See Bachelor's Degrees, Organization and Administration.

There is no department of Business Administration. Courses which deal directly with Business Administration are to a large extent offered by members of the department of Economics and Sociology.

The Division of Business Administration operating through a Director and an Administrative Committee has supervision over the program of studies leading to the B.B.A. degree.

The program for the B.B.A. degree consists in part of courses which are equally available for credit toward the A.B. degree, or the B.B.A. degree and in part of courses for which credit is given toward the B.B.A. degree only.

A major in Economics and Sociology with emphasis on Business Administration is available for A.B. candidates.

There is no provision for a graduate degree in Business Administration.

CALENDAR. The academic calendar provides for an academic year

CALENDAR (cont.)
of 37 weeks including 34 weeks during which the University is in session, recesses at Thanksgiving, at Christmas and in April and several single-day holidays.

The academic year begins on Monday before the fourth Thursday in September (Sept. 19 to 25) and ends on the 37th. Saturday following (June 3 to 9).

Commencement day is the Sunday following the end of the academic year (June 4 to 10).

The first semester includes the Thanksgiving recess of three days and a recess of two weeks including Christmas Day and New Years Day. Classes are suspended also on Registration Day (the first Monday), on Columbus Day (Oct. 12) and on a day near the end of the semester set aside as Registration Day for the second semester. Fourteen weeks are devoted to class meetings and two weeks to final examinations. The first semester ends on the nineteenth Saturday of the academic year.

The second semester begins on the twentieth Monday of the academic year and includes the spring recess, the first full week in April. Classes are suspended also on Washington's Birthday and, for undergraduates, on Spring Spree Day. There is an interval of one or two days between the last recitations and the beginning of the final examination period. Approximately fourteen weeks are devoted to class meetings and two weeks to final examinations. Examinations end two or three days before the end of the semester.

The summer vacation extends from Commencement (June 4 to 10) to the opening of the following academic year (Sept. 19 to 25).

Between 1942 and 1948 the academic year was shortened by two weeks, one in each semester, to accommodate a twelve-week summer term. One week was restored in the second semester of 1948-49 and the normal schedule is to be resumed in 1949-50.

The six-week summer school usually begins on a Monday near the first of July. From 1942 through 1949 a twelve-week summer term began about a week after commencement and continued until near the end of August.

CANDIDACY for a degree. See also Doctor of Philosophy, Master of Arts, etc.

1. Admission to the Graduate School does not in any way imply that admission to candidacy for a graduate degree will follow as a matter of course. Admission to candidacy is a separate and distinct step taken only after a student has demonstrated to the satisfaction of the Graduate Board his fitness and ability to proceed creditably to the degree sought.
2. Admission to the college implies candidacy for either the A.B. or the B.B.A. degree.

CATALOG. The University catalog is published annually as soon as possible after the end of the first semester.

CATALOG (cont.)

The catalog is a record for the current academic year. Announcements for the following year which can be made at the time of publication are included.

The catalog should be consulted for general information about the University, current regulations, departmental announcements and descriptions of courses.

The usefulness of the catalog depends in part on its publication at the earliest possible date. Members of the Faculty can help materially in this connection by carefully observing the time schedule set by the editor for the delivery of copy and the correction of proof.

CERTIFICATION for Admission to the College. See Admission.

CHANGE OF CANDIDACY from one bachelor's degree to the other may be authorized by the College Board.

In such cases there are adjustments to be made which frequently result in a loss of credit. There may also be entrance requirements to be made up. Consequently it may be difficult to complete the requirements for the new degree within the normal four-year period.

CHANGE OF DEPARTMENT. A graduate student may change the department in which he is registered only by action of the Graduate Board. Such a change may modify the status of a student with respect to the time at which he may qualify for a degree. An undergraduate may change his major department with the consent of the Dean.

CHANGE OF PROGRAM.

1. A change in the program of a graduate student requires the approval of the student's major department.
2. A change in the program of an undergraduate may be made during the first week of any semester, with the approval of the student's adviser, if the change does not involve departure from a normal program.

   Changes which involve departure from a normal program or which are proposed after the first week of the semester require ap proval by the College Board.

Withdrawal from a course if permitted after an announced date involves a record of failure in the course.

CHEATING. See Dishonesty.

CHRISTMAS RECESS. See Calendar.

CLARK, JONAS GILMAN, founder of Clark University. See Historical Sketch in the University Catalog.

CLARK COLLEGE. See Colleges, Admission, Bachelor's degrees, etc.

CLASSICS. (Greek and Latin). A candidate for the A.B. degree with a major in Group C must satisfy a requirement of one course in

CLASSICS (cont.)

Latin or Greek or Classical Civilization unless he has presented at least two units of Latin or Greek for admission.

CLASSIFICATION OF UNDERGRADUATES. College students are classified as freshmen, sophomores, juniors or seniors on the basis of the amount of credit toward the bachelor's degree shown by their records at the beginning of each academic year.

A student who has credit for less than two and one half courses is classified as a freshman.

A student with credit for as much as two and one half courses but less than eight courses is classified as a sophomore.

A student with credit for as much as eight courses but less than fourteen courses is classified as a junior.

A student with credit for fourteen or more courses at the beginning of a year is classified as a senior.

The classification of a student is not changed during the academic year, with the exception that a student who, at the beginning of any semester, is clearly in a position to complete the requirements for a bachelor's degree before the beginning of the next semester is classified as a senior.

COLLECTIVE EXAMINATIONS. See Examinations.

COLLEGES, The. See also Admission, Bachelor's Degrees, etc.

1. The Men's College (Clark College) received its first students in 1902 and graduated its first class with the A.B. degree in 1905.

The normal period of residence for the A.B. degree continued to be three academic years until 1922. The adequacy of the three year program depended upon careful selection of students, close contact between students and Faculty, careful supervision of students' work and the absence of distractions due to intercollegiate athletics and other extra-curricular activities.

Since 1922 four academic years has been the normal period of residence for a bachelor's degree.

Until 1941, when the degree of Bachelor of Business Administration was authorized, the only degree granted by the college was the A.B.

The College and the Graduate School operated with separate faculties until the spring of 1921.

2. The Women's College of Clark University was established in the fall of 1942.

All courses of instruction available for men are open to women. The requirements for admission and for a bachelor's degree are the same as those for men, and the same tuition and fees are charged.

The general supervision of the activities of women students is in the hands of the director of student activities.

An Advisory Board makes recommendations to the President on matters of general policy.

Women maintain separate student body and class organizations and

COLLEGES (cont.)
have their own athletic programs. In most other student activities they cooperate with the men on a common basis.

COLLEGE BOARD. See Organization and Administration.

COLORS, University. The official University colors are emerald green, scarlet and white.

Emerald green and white are the traditional colors of the Graduate School and are used in the hoods for the Ph.D. degree.

Scarlet and white are the traditional colors of the colleges.

COLUMBUS DAY, October 12, is observed as a holiday.

COMMENCEMENT exercises for the conferring of degrees are held at the end of the academic year and also, when necessary, at the end of the first semester and of the summer term.

A member of the Faculty is expected to attend the official University exercises connected with the commencement season unless he has previously arranged with the President to be absent.

COMMITTEES. For standing committees see Organization and Administration.

Important actions by standing committees and reports of special committees are usually recorded in the minutes of the bodies to which the committees report. These may be consulted at the General Office.

Committee reports should in all cases be presented in writing and should preferably indicate the basis for any recommendations as well as the recommendations themselves.

COMMITTEE on INSTRUCTION. (Visitation committee) At any appropriate time a group of competent persons may be invited by the President to visit the University and to study the organization and functioning of a specified department. Out of such visitations and the conferences which supplement them it is expected that suggestions helpful to the department and to the University will emerge.

COMMITTEE on UNIVERSITY NEEDS. A committee composed of faculty members, trustees, alumni and friends of the University appointed by the President.

COMPREHENSIVE EXAMINATIONS. See Examinations.

CONCENTRATION. Area of concentration. See Bachelor's degrees, Master of Arts, etc.

CONDITION. Admission to College with conditions.

An applicant for admission to the college who lacks one or two of the required fifteen units of certified credit or its equivalent may be admitted with one or two "conditions" respectively.

Conditions are removed if, at the end of the freshman year, the student has completed a program of at least five courses with no failures and three-fourths of his grades above D+.

CONDITION (cont.)

Conditions may also be removed by a satisfactory record in College Board Examinations at any time before the beginning of the student's second year in college.

Each condition not removed before the beginning of the student's second year in college is replaced by an additional requirement for graduation amounting to one-half course.

CONDITIONAL CREDIT. See Credit.

CORRESPONDENCE COURSES are not normally accepted by the Graduate School or by the College for credit toward a degree. They are occasionally used without credit to cover some specific deficiency in subject matter.

Such courses were accepted up to a maximum of 30 semester hour for credit toward the degree of Bachelor of Education.

Correspondence courses in Geography were offered by the School of Geography from about 1922 to 1935.

COUNSELLOR for student organization. Each undergraduate student organization is required to have a "counsellor" who is a member of the Faculty chosen by the organization.

The counsellor's duties are chiefly advisory, but he is responsible for seeing that university regulations which affect the organization are brought to the attention of its officers.

COURSE. A course is the unit of instruction in terms of which student programs, requirements for degrees and other academic regulations are stated.

An undergraduate course normally meets for class room or laboratory exercises three or four times weekly throughout the academic year, and constitutes one fifth of the normal program of a college student.

Graduate courses are more variable in respect to the number of meetings per week.

Courses are classified under three headings as follows:

1. "Primarily for Undergraduates" designated by numbers beginning with the figure (1).

   Freshmen are restricted to courses designated as "open to freshmen."

2. "For Advanced Undergraduates and Graduate Students," designated by numbers beginning with the figure (2).

   These courses are open to juniors and seniors in the college, with the approval of the instructors.

3. "Primarily for Graduate Students," designated by numbers beginning with the figure (3).

   These courses are not normally open to college students, but seniors with sufficiently good records may be admitted on petition, with the approval of the instructor.

COURSE (cont.)

Courses are also classified as:

Divisible, indicating that credit is normally granted for the satisfactory completion of the work of either semester.

Indivisible, indicating that credit is not normally given until the work of both semesters is satisfactorily completed.

New undergraduate courses or substantial modifications of existing courses require approval by the academic council before being announced.

CREDENTIALS, COMMITTEE ON, of the Graduate Board. See Organization and Administration.

CREDIT. Credit toward a degree in Clark University, is expressed in terms of "courses."

Credit for a course is dependent on compliance with all University regulations which apply to the degree in question as well as a satisfactory grade in the course.

Each course yields credit for a half-course in each semester unless its value is otherwise stated, or it is "indivisible."

Conditional credit for work done elsewhere prior to admission to Clark University may be granted by the Graduate Board or by the College Board on the recommendation of a department. In such cases final confirmation of the credit is postponed until its inclusion in the student's record serves to complete the requirements for a degree.

Credit for work to be done elsewhere by a student who is enrolled in Clark University requires official approval in advance.

CRIBBING. See Dishonesty.

CUMULATIVE AVERAGE GRADE. The average of all grades received by a student during his college course up to the time when the average is calculated.

Cumulative averages determine eligibility for departmental honors programs. They also determine "rank in class" and are a determining factor in the award of a bachelor's degree "with honor."

CURRICULUM. See Program of Studies.

CURRICULUM, COMMITTEE ON, of the Academic Council. See Organization and Administration.

DEAN. See Organization and Administration.

DEAN'S LIST. A term without official sanction used by undergraduates to designate the list of students who by reason of an average grade of B- or better for the preceding semester are freed from restriction on the number of class absences which they may take.

DEGREES. See Bachelor's Degrees, Master of Arts, Etc.

DEPARTMENTAL HONORS. See Honors.

DEPARTMENTS. For information concerning individual departments see the current University catalog.

All departments offer undergraduate courses. All but a few offer an undergraduate major. Some offer no graduate work, others offer a limited amount of graduate work leading to a Master's degree, and some offer a program leading to the Ph.D.

Departmental offerings are supplemented by courses in fields not covered by existing departments, notably Philosophy and Health Education.

Each department is authorized to adopt, subject to approval by the President, such form of organization as it may decide.

The members of each department are authorized to consider and to recommend to the President, candidates for appointment and for promotion within the department.

An annual report, including an estimate of budgetary needs for the following year, is submitted to the President by each department near the end of each academic year.

Purchases of supplies or equipment by a department are required to be made through the Bursar's Office. Expenditures must be kept within the amount provided in the departmental appropriation or in grants for specific purposes.

DINING HALL. The facilities of the Dining Hall are available to all members of the student body and staff of the University.

College students who do not live in their own homes are required to board at the Dining Hall. Authority to waive this regulation in exceptional cases rests with the Dean of the college.

The cost of board is fixed annually at the lowest figure which can reasonably be expected to cover actual costs.

For every student who is obligated to board at the Dining Hall the cost of board is a fixed charge as long as he or she is enrolled in the college. No refunds are granted for absences except in cases of protracted illness.

DISHONESTY BY STUDENTS in examinations or in class work. Instructors are individually responsible for the prevention of dishonesty in class work and in examinations. "Any instructor discovering a case of dishonesty on the part of an undergraduate in an examination or test shall at once report the facts---to the Dean of the college who shall lay the case before the College Board."

Dishonesty in class work, themes, assigned problems, etc. should be reported to the Dean and handled as may be agreed upon.

In collective examinations the proctors are responsible for the detection of attempted dishonesty. Anything which arouses suspicion should be reported to the Head Proctor. The Head Proctor may take whatever steps he may consider to be desirable and must in any case of apparent attempt at dishonesty, report the facts to the Dean.

DISTRIBUTION of subject matter in student's program. See Bachelor's Degree, Master's Degree, etc., also Major.

DIVISIBLE COURSE. See Course.

DIVISION. One of the larger units in the university organization, as the Graduate Division of International Affairs, the Division of Business Administration, etc.

DOCTOR OF PHILOSOPHY. At least one year of full time study in residence at Clark University, or its equivalent, is required for a doctor's degree.

Admission to candidacy is by vote of the Graduate Board on the recommendation of a department. It normally follows at least two years of graduate study by the candidate and precedes the granting of the degree by at least one semester.

A preliminary examination covering broadly the subject matter of course work precedes admission to candidacy.

A reading knowledge of two foreign languages, usually French and German, evidenced by the passing of an examination, is required.

Admission to candidacy holds good for three years and may be extended once for a like period.

A dissertation, which is expected to make an original contribution to some field of knowledge is required.

Two copies of the dissertation and three copies of an abstract not exceeding 1200 words, both approved in writing by the chief instructor, must be delivered according to instructions in the University catalog.

The final examination is oral and lasts for at least two hours; additional written examinations may be given if the major department so directs.

The oral examination is conducted by a committee of at least four members, including the chairman and one other member of the major department, a member of the Graduate Board under whom the candidate has done no work, and at least one other member of the Board.

DORMITORIES. Freshman men who do not live in their own homes or with near relatives are required to room in Estabrook Hall. Rooms which are not required by freshmen may be rented by upper class men or by graduate students.

Women undergraduates who do not live in their own homes are required to room in one of the women's dormitories throughout the college course.

Authority to waive these regulations rests with the Dean of the College.

EDUCATION. Instruction in "Education" is offered in the Department of Psychology and Education.

An undergraduate major in Education is not offered.

A five-year program including a bachelor's degree followed by a year of graduate study leads to the degree of Master of Arts in Education.

EDUCATION (cont.)

The Ph.D. in Education is not offered.

EDUCATION, Bachelor of. See Bachelor's Degree.

EDUCATION, Master of Arts in. See Master's Degree.

ELIGIBILITY for extra-curricular activities. (Undergraduates). Participation in organized extra-curricular activities is denied only when a student's scholastic record indicates that continuance in an activity might be responsible for scholastic failure.

A student is "eligible" during any half-semester if he is enrolled in a regular program of five courses and at the end of the preceding half-semester has (a) "passed" in all courses and been graded at least C- in one of them, or (b) "passed" in all but one course and been grade at least C- in two of them. A student who does not meet the requirements for eligibility is ineligible.

Any student carrying less than a full program of studies is ineligible unless his reduced program permits graduation at the end of the year in which that program is carried.

Special eligibility regulations apply to officers of the student body organizations and to class officers.

Eligibility and ineligibility become effective on the eleventh day after the beginning of a half-semester and continue through the tenth day of the succeeding half-semester.

Students admitted with advanced standing from another college are ineligible for all activities during the first half-semester of residence at Clark University. Such students may not participate in intercollegiate athletics during their first year of residence.

A special student is not entitled to participate in competitive activities of the college. The College Board may, however, permit such participation if the student is enrolled in a full program (five courses). Special students may participate in non-competitive activities under special regulations established by the College Board.

ENGLISH. Three units of English are required for admission to the colleges.

A course through the freshman year and an additional half course are required for a bachelor's degree.

"Satisfactory proficiency" in the use of English is a requirement for a bachelor's degree.

The required freshman course is not counted as part of a major in English.

Graduate work in English is not offered.

ENGLISH LANGUAGE requirement for graduate students. A graduate student whose native language is not English may be required by the Graduate Board to secure an adequate command of the English language.

ENROLLMENT. A student is not formally enrolled in the University until he has, 1, been formally notified of his acceptance for admission; 2, has paid the matriculation fee; 3, has registered for a suitable program of courses; 4, has paid his tuition or has made formal arrangements for deferred payment.

ENROLLMENT STATISTICS are published annually in the University Catalog.

EVENING COURSES. From time to time regular college courses or graduate courses, particularly those of interest to teachers in service, are scheduled in the evening.

When extension courses were offered they were occasionally scheduled for the evening.

EXAMINATIONS.

(1) For graduate students.

Course examinations. A graduate student is responsible, in general, for examinations as required by the instructor in any course, graduate or undergraduate, in which he may be enrolled.

He may be excused by his major department from final examinations in particular courses on the basis of performance in general examinations.

Preliminary examination for the Ph.D. See Doctor of Philosophy.

Final examination. Oral examination. See Doctor of Philosophy and Master of Arts.

Foreign language examination. See Doctor of Philosophy and Master of Arts.

(2) For undergraduate students.

Final examinations. A final written examination is regularly required in each course at the end of each semester. This examination is normally three hours in length.

A period of approximately two weeks is set aside at the end of each semester, following the end of class work, for final examinations.

There is no regulation respecting the relative weight to be given to the final examination or to other items in determining the final grade in a course.

Absence from a final examination, if avoidable, will usually result in a record of "failure" in the course. If the absence was unavoidable the record may be "incomplete."

An honors candidate who has passed a "comprehensive examination" may, at the direction of the department, be excused from some or all of the regular final examinations in the major subject.

Collective examinations. For final examination purposes undergraduate courses are arranged in groups which avoid conflicts within each group. The examinations for all courses in a group are held simultaneously under standard conditions.

Students are required to sit in assigned places and to observe all reasonable regulations of the proctors. They must not bring to the

EXAMINATIONS (cont.)
place of examination any books or papers unless explicity instructed to do so.

A student may not leave the examination room during an examination unless authorized to do so by a proctor. In such cases the student is expected to hand in his partially completed paper, and to resume writing, on his return, in a new book.

The proctors are responsible for the orderly conduct of the examinations and for the prevention of dishonesty. Any irregularities which may be observed are to be reported to the head proctor.

The head proctor has general responsibility for the examinations and must report to the Dean the full details of any cases of suspected dishonesty.

Comprehensive examinations. A condition for departmental honors is the passing “with distinction” of a comprehensive examination in the “major field.”

This examination extends over at least two and not more than three three-hour periods. One three hour period must be devoted to a written examination. The remaining time may be used for written or oral examinations or for laboratory tests.

A student who has made a satisfactory record in these examinations may be excused from some or all of the regular examinations in his major field.

Comprehensive examinations are held between the Spring recess and May 15th.

By vote of the Faculty on 15 April, 1949 to go into effect with the college class of 1953, any department is authorized to require comprehensive examinations for all students majoring in the department. The same authorization was given for the Division of Business Administration and for the “instructor in charge” of any inter-departmental major program.

General supervision of the program of comprehensive examinations is a responsibility of the Academic Council.

Mid-semester examinations. No special time is set aside for these and they are usually given in regular class periods. It is desirable to give such examinations earlier than the last three or four days before mid-semester reports are due.

Informal examinations and tests are given as frequently as may be desired at the discretion of each instructor. All or part of any class period may be utilized for this purpose and announcement in advance may or may not be given as the instructor thinks best.

It is desirable that such tests be sufficiently numerous to afford a satisfactory basis for a final grade which will accurately reflect a student's accomplishment in each course.

EXCUSED ABSENCES. (undergraduate) See *Absence*.

A student whose absences from class are excused for any reason is nevertheless responsible for all regular requirements of the courses

EXCUSED ABSENCES (cont.)
in which the absences occur, including written reports, tests, examinations, laboratory exercises, etc.

EXECUTIVE COMMITTEE of College Board. See Organization and Administration.

EXECUTIVE COMMITTEE of Academic Council. See Organization and Administration.

EXTENSION COURSES. (College courses for adults).

Such courses have not been offered by the University since the beginning of the war emergency. Their resumption is under consideration.

A member of the Faculty may be authorized to teach one such course at the University or elsewhere in addition to his regular teaching program.

Compensation has in the past been in addition to the regular salary of a faculty member and has as a rule been based upon fees received from the courses.

Control of such courses has been in the hands of a standing committee of the Faculty.

Such courses have not normally been available to undergraduates or to graduate students for credit toward a degree in Clark University.

EXTRA-CURRICULAR ACTIVITIES - See Activities.

EXTRA TEACHING, in addition to regular university program. See Extension Courses.

FACULTY. See Organization and Administration.

FACULTY MEETINGS are held on a monthly schedule and at other times at the call of the President. The Secretary of the Faculty is required to call a meeting on the written request of five members.

It is a duty of members of the Faculty, when in residence, to attend faculty meetings.

A quorum for the legal transaction of business during the regular academic year, consists of one more than half of the members of the Faculty in residence.

Minutes of faculty meetings are kept on file at the General Office where they may be inspected by members of the staff.

FAILURE IN A COURSE. See also Grades.

Failure in general characterizes such lack of accomplishment by a student that he is not qualified to continue in the further work of the course or in other courses for which the course "failed" is a prerequisite. It may also indicate that, in the judgement of the instructor, the student's accomplishment in the course is not of sufficient value to count as a contribution toward the requirements for a degree.

FAILURE IN A COURSE (cont.)

Each instructor is authorized to set up his own standards for "passing" and "failing."

Failure in a course may not be "made up" except by repeating the course.

Failure in examination may be treated as the instructor decides.

There is no provision for "make up" of failures in final examinations. In less formal examinations the practice varies.

FEES and DEPOSITS. See the University Catalog.

FELLOWSHIPS, SCHOLARSHIPS AND STUDENT AID. (Graduate) See also Honorary Fellowships.

Graduate fellowships and scholarships are available for prospective candidates for the graduate degrees.

Fellows and scholars are appointed by the Graduate Board on the recommendations of the departments concerned.

Fellows and scholars are expected to cooperate with the staffs of the departments, and may by mutual agreement undertake limited responsibilities. They are never called upon to perform services which would interfere with the completion of a full-time program of graduate study.

Stipends vary but usually include remission of tuition and may include, in addition, one or more of the following: room, board at the University Dining Hall, payments in money.

Teaching fellowships are available in certain departments. These involve a specified amount of instruction with stipends which vary according to the amount of service agreed upon, and generally do not permit a full program of graduate study.

Student aid in the form of grants or loans is available from various funds. For details see the University Catalog.

FIELD CAMP OF THE GRADUATE SCHOOL OF GEOGRAPHY. See Geography.

FIELD TRIPS and excursions for undergraduates, which constitute a part of the requirements of any course and which involve absences from scheduled meetings of other courses, may be authorized by the College Board.

An instructor may, in any semester, use not more than three days of regular class work for field trips connected with any one course.

No field trips involving absence from classes may be scheduled during the week preceding a final examination period.

Participation in such trips does not relieve a student from any requirements, excepting attendance, in the courses from which he may be absent.

After the completion of a field trip the instructor in charge is required to report to the Recorder the names of all students who participated and the period of time for which they were necessarily absent from other university engagements.

FINAL EXAMINATIONS. See Examinations.

FINE ARTS. There is a requirement of one half-course in Fine Arts for the A.B. degree.

Courses in Fine Arts are given to University students both at the University and at the Worcester Art Museum. Certain members of the Museum staff are on the University faculty as well.

FINE ARTS LECTURE COURSE. A series of lectures, concerts, etc. offered in the fall of each year and open to the public has become an outstanding feature of the cultural life of Worcester.

The entire undertaking has been in the hands of Professor Dodd and Mrs. Dodd without dependence on the University for financial support. Any profits are used for the enrichment of the course or to add to the art collection of the University.

FOREIGN LANGUAGE is normally included among the subjects offered as a basis for admission to the colleges for the A.B. program and is required for the B.B.A. program. A single unit in foreign language is not accepted.

Candidates for the A.B. degree must include a course in foreign language in their freshman programs and must complete a course at the level of third year college language courses.

There is no requirement of foreign language in college for candidates for the B.B.A. degree.

Candidates for a Master's degree may be required to demonstrate a reading knowledge of one foreign language, normally either French or German.

For the Ph.D. degree, a prerequisite for admission to candidacy is the passing of an examination demonstrating a reading knowledge of two foreign languages, usually French and German.

FRATERNITIES. Two national fraternities, Lambda Chi Alpha and Phi Alpha, and one local fraternity, Kappa Phi have chapters at the University.

The attitude of the University toward fraternities is one of cordial cooperation.

FREEDOM OF SPEECH. See Academic Freedom.

FRESHMAN. See Classification of Undergraduates, also Program of Studies, etc.

FULL-TIME STUDY implies:

1. In the case of a graduate student, a program satisfactory to the student's major department and to the Graduate Board.
2. In the case of an undergraduate, a program of five or six courses.

GEOGRAPHY. The Graduate School of Geography functions as a Department of Geography in respect to University regulations which apply to departments.

GEOGRAPHY (cont.)

Instructions at the graduate level is characterized by an annual "field camp" in the Fall, by consequent delay of about four weeks in the beginning of regular course work and by a "reading period" at the end of the Spring semester.

The School of Geography edits and publishes the "Journal of Economic Geography."

GEOLOGY. The department regularly offers a two year program in Geology. An undergraduate major is occasionally provided for an unusually promising student.

The department maintains a well arranged museum in Jonas G. Clark Hall.

GOOD STANDING IN THE COLLEGE. A student is in good academic standing in the college when not more than one fourth of his grades are D's both in his current record and in his cumulative record.

A student who is not in good standing is subject to such action as the College Board may deem necessary at any time.

GRADES AND GRADING.

A final semester grade is given in each course at the end of each semester. These are the official grades which appear on a student's university record.

Promptness in reporting final grades according to a schedule supplied by the Recorder is a matter of great importance both for students and the Recorder's Office.

No year grades are given.

Temporary grades are reported for all students at the middle of each semester. These are not entered on the student's official records and may be treated in any way satisfactory to the instructor in arriving at a semester grade.

Grades, which are regarded merely as current estimates of progress, may be requested at other times.

In the Graduate School a student's record in a course is generally reported in terms of P, passed (i.e. Satisfactory) or F, failed.

Graduate students in undergraduate courses may receive reports as above or on the undergraduate basis, at the discretion of the instructor.

In the Undergraduate School grades are reported in terms of A, excellent; B, good; C, average; D, poor; F, failure. The modifying symbols plus (+) and minus (-) are used with A, B, C, and D to indicate variations within each general classification.

Failures may not be "made up," except by repeating the course.

A "failure" (F) is recorded in any course from which a student withdraws, voluntarily or involuntarily, after the date of mid-semester reports.

A report of "incomplete" is permitted only when severe sickness or some equally unavoidable circumstance prevents the completion of a course.

GRADES AND GRADING (cont.)

A record of "incomplete" incurred in the spring semester or in the summer school may stand only until the time of mid-semester reports in the following fall semester.

If the work of a course in which "incomplete" has been recorded is not "made up" to the satisfaction of the instructor by the times specified above, the record in the course is changed to "failure" (F).

If an undergraduate is admitted to a graduate course, his grade in such a course is usually reported in terms of A, B, C etc.

Change of grade. After a semester grade has been officially reported to the Recorder it can be changed only by authorization of the College Board and only to correct a clerical or computational error.

Grades in repeated courses. If a student repeats a course both the original grades and the repeat grades are shown on his official record, and both enter into his average grades.

To guard against extreme variations in the grading practices of individuals or departments, certain normal distributions have been officially accepted by the Faculty. These are - -

For freshmen and sophomores				For juniors and seniors			
A	B	C	D-F	A	B	C	D-F
9%	26%	40%	25%	12%	30%	45%	13%

It is expected that an instructor will, in the long run, not depart widely from these norms unless he can demonstrate on the basis of objective evidence that the departures are justified.

Responsibility for the enforcement of these regulations is explicitly assigned to the President.

GRADUATE BOARD. See Organization and Administration.

GRADUATE COURSES.

Courses of study "Primarily for graduate students" are designated by numbers beginning with the figure 3.

These courses are not normally open to undergraduates. A college senior with a first class scholarship record may be admitted on petition.

Courses "For advanced undergraduates and graduate students" are designated by numbers beginning with the figure 2.

These courses may be elected by juniors and seniors in the college, with the approval of the instructors in charge.

GRADUATE RECORD EXAMINATIONS, provided by the Cooperative Test Service, test general knowledge in the field of study covered by the curriculum of the liberal arts college, and require no special preparation.

A record in these examinations is desirable and may be required in connection with an application for admission to Graduate School.

These examinations have been required of college seniors, at the expense of the college, for a number of years.

GRADUATE SCHOOL. See Organization and Administration, Admission, etc.

GRADUATE STUDENTS are those persons who have been formally admitted to the Graduate School by the Graduate Board. They may be candidates for a graduate degree or other mature persons with the necessary educational background.

GRADUATION. See Commencement.

GREEK. See Classics.

GROUP. Groups of departments.

Subjects in which instruction is offered in the college are classified as follows:

Group A. Biology, Chemistry, Experimental Psychology, Geology, Mathematics, Physics.

Group B. Economics, Education, Geography, History and International relations, Philosophy, Psychology, Sociology.

Group C. English, French, German, Greek, Latin, Spanish.

Group D. Fine Arts.

The "groups" are recognized as a basis for informal organizations within the Faculty for the consideration of questions of common interest to the departments involved.

Candidates for the A.B. degree are required to meet specified requirements in each group.

GRYPHON is the senior honorary society in the men's college. Its central purpose is to further the ideals for which Clark was founded. Members are chosen from the junior class.

GYMNASIUM. Use of the gymnasium facilities is open to members of the university staff.

Graduate students and special students may secure gymnasium privileges by the payment of a special fee.

Undergraduates are entitled to gymnasium privileges on payment of the activities fee.

Women students use their own gymnasium for practice but have the use of the university gymnasium for games with outside organizations.

HANDBOOK of information for students. See Publications.

HEALTH EDUCATION FOR WOMEN. A required non-credit course offered annually for students in the Women's College.

HEALTH INSURANCE. See Insurance.

HISTORY OF THE UNIVERSITY. See the University Catalog.

HOLIDAYS. See Calendar.

HOME STUDY COURSES. See Correspondence Courses.

HOME STUDY COURSES (not correspondence courses.) See Summer Study Courses.

HONOR SOCIETY. See Scholarship Society, Gryphon, Pleiades.

HONORARY DEGREES. Candidates for honorary degrees are nominated to the Board of Trustees by the Faculty. The Senate may recommend candidates to the Faculty.

HONORARY FELLOWS. May be appointed for specified periods at the discretion of the Graduate Board.

Such appointments entitle the holder to all university privileges. They carry no stipend and involve no university fees.

HONORS

1. Annual honors. "First honors" and "second honors" are awarded annually to freshmen, sophomores, juniors and seniors who have, in the judgement of the College Board, distinguished themselves by their scholarship during the preceding year.

Annual honors are based primarily on average grades for the year under consideration.

2. The bachelor's degree with honor.

(a) Honors in general course.

The bachelor's degree is awarded "with honor," "with high honor," and "with highest honor" to members of each graduating class whose records, in the judgment of the College Board, warrant this distinction.

A student's cumulative average grade is a major consideration in the award of a degree with honor.

(b) Honors in a specified subject or department (Departmental honors).

The Academic Council is charged with the supervision of "Departmental Honors."

A student whose cumulative average grade to the end of his sophomore year places him in the upper third of his college class may, with the approval of the College Board, become a candidate for honors in a specified subject or department. The same provision applies to candidates for the degree of Bachelor of Business Administration and to students with inter-departmental majors.

Admission to candidacy for "departmental honors" is possible as late as the middle of a student's junior year.

A candidate for departmental honors prepares, with the assistance of his "honors' adviser," a program of courses leading to graduation. This may include one or two "honors courses" in the major field which replace a like number of regular courses. This "honors program" is filed with the Recorder.

Departmental honors are awarded by the College Board on the recommendation of the department concerned. In order to be recommended a student must maintain a scholarship standing in the

HONORS (cont.)
upper half of his college class, and must pass "with distinction" a comprehensive examination in his major field.

A candidate who has passed his comprehensive examination may be excused from some or all of the regular final examinations in his major field.

Candidacy for departmental honors may be terminated for cause at the end of any semester by the College Board. In such cases the credit to be allowed for "honors courses" is determined by the Board.

HONORS ADVISER. See Adviser.

HONORS COURSES for candidates for departmental honors.

Courses which are specifically designed for candidates for honors in a particular department or field of study. They commonly involve a more mature approach to the subject matter and more independent work on the part of the student than is the case with regular courses.

HONORS PROGRAM. The program arranged by a candidate for departmental honors, with the cooperation of his honors adviser, covering the last two years of the college course. The program which may include one or two honors courses, is filed with the Recorder.

INCOMPLETE (record in a course). See Grades and Grading.

INDUCTION PERIOD. All students who have been accepted for admission to the freshman class in September are required to assemble two or three days before the beginning of the academic year.

This period is used to familiarize the new students with the traditions and regulations of the college, to administer certain formal tests, for conferences and for the promotion of acquaintance.

A small fee is charged for the induction period.

INELIGIBLE. See Eligibility

INSTRUCTORS are normally appointed for a definite term of one or two years and are eligible for reappointment or promotion. Instructors are members of the Faculty.

After a maximum of four years of service as instructor an individual is normally either promoted to the rank of assistant professor or is offered a terminal one-year appointment.

Indefinite or permanent tenure is usually not given to an instructor.

INSURANCE - medical, surgical and hospital.

By assuming a substantial part of the total cost the University has made it possible for all full-time members of the Faculty and other employees to secure, through group insurance at a very moderate cost, protection against the risk of sickness or accident.

Individual application should be made by any eligible person who wishes to be included in this plan.

INTERNATIONAL AFFAIRS, Graduate Division of. A cooperative undertaking by the departments of Economics and Sociology, Geography and History and International Relations.

It aims to meet a demand for programs leading to the Ph.D. and M.A. degrees in the general field of international affairs.

Students are admitted under the sponsorship of any one of the three cooperating departments as prospective candidates for the M.A. or the Ph.D. degree.

JUNIOR. See Classification of Undergraduates, Program of Studies.

LABORATORY COURSES. Courses which involve laboratory work normally require a special laboratory fee and in some cases, a breakage deposit.

These courses at the elementary level generally involve three class meetings and one laboratory period per week.

One such course in Group A, is a requirement for the A.B. degree.

LANGUAGE, foreign,- See Foreign Language, also the individual languages.

LATIN - See Classics.

LEAVE OF ABSENCE. See Absence, Sabbatical Leave.

A leave of absence from university duties for a member of the Faculty requires action by the Trustees, on the recommendation of the President and the department concerned.

LIBERAL ARTS. See Colleges, Bachelor's Degrees, etc.

LIBRARY. The University library received, under the will of the founder, one quarter of his estate as an endowment distinct from the general University endowment.

General regulations for the use of the Library are established by the Librarian with the advice of the Library Committee of the Faculty.

Students have unrestricted access to the general book collection.

Books are loaned for a two-week period. Any book needed for "reserve" or for other important reason may be recalled before the end of the period for which it is charged.

A borrower is responsible for loss or damage to any book while it is charged to him.

Books in certain special collections do not circulate at all. In other cases books may be withdrawn only by special arrangement with the Librarian.

LOANS to students are available from several funds established for this purpose. Loans are made on properly endorsed notes and bear interest at 4%.

Graduate students apply for loans thru their major departments.

Undergraduates apply to the Dean of the College.

LOSS OF CREDIT toward a bachelor's degree.

1. For excess absences - See Absences.
2. For failure to remove a condition - See Condition.
3. In connection with change of candidacy for a degree. See Change of Candidacy.

MAJOR. Major subject for the A.B. degree.

A candidate for the degree of Bachelor of Arts must designate a major subject in connection with registration at the beginning of his second year in college. This election when once recorded may be changed only with the approval of the Dean.

The major may be:

(a) A departmental major consisting of seven courses designated by a department as constituting a major. Of these, four or five must be courses given by the major department. The others must be in subjects related to the major subject.

Certain majors involve additional supplementary subject matter requirements.

(b) An interdepartmental major consisting of eight or more courses approved by the Academic Council as constituting such a major.

Of the fourteen semester grades recorded in a seven-course major, at least eleven must be C or higher.

At the end of the sophomore year any student whose average grade places him in the upper third of his class may apply for acceptance as a candidate for Departmental Honors in his major subject.

MAKE UP of academic work. Failure in a course can be made up only by repeating the course. In this case both grades remain on the student's record.

Any part of the requirements of a course which may be in arrears because of absences or other cause must be "made up" to the satisfaction of the instructor and within a reasonable time before a grade for the course will be reported.

See also Examinations, Absences, etc.

MARKING. See Grades and Grading.

MASTER OF ARTS. MASTER OF ARTS IN EDUCATION. A minimum of one year of full-time study in residence at Clark University, or its equivalent, is required for a Master's degree.

A reading knowledge of a foreign language may be required by the major department.

Admission to candidacy which must precede the granting of the degree by at least a semester, is by vote of the Graduate Board on the recommendation of a department.

Admission to candidacy holds good for three academic years and may be renewed for a like period.

MASTER OF ARTS (cont.)

The minimum course requirement is five courses, one of which may be devoted to the preparation of the thesis.

A copy of the thesis with an abstract not exceeding 600 words, both approved by the supervising instructor must be delivered to the Recorder for deposit in the Library.

Written examinations, as may be specified by the major department, and a final oral examination are required.

The oral examination is conducted by a committee of three, two of whom must be members of the Graduate Board.

MATHEMATICS. Required for admission to the college; two years for A.B. candidates, one year for B.B.A. candidates.

Required in the freshman year of candidates for the A.B. degree who expect to elect a major in Group A, and of all candidates for the B.B.A. degree.

Mathematics 11 yields only 2/3 of a course credit if taken later than a student's sophomore year.

MATRICULATION FEE. This fee ($5.00) is collected after a student has been formally admitted to the University and before he is permitted to register for a program of courses.

The fee is collected only once. Official statements of students' records in the University are issued for matriculated students only.

Auditors are not required to pay the matriculation fee.

MAXIMUM AMOUNT OF TEACHING by a member of the Faculty in addition to his regular university program. See Extension Courses.

MEETINGS, of Faculty. See Faculty Meetings.

MEETINGS OF PROFESSIONAL AND SCHOLARLY SOCIETIES. Members of the Faculty are encouraged to attend and to participate in such meetings.

The University customarily contributes toward the expenses of such attendance. The amount of the contribution in any particular case depends on the amount appropriated for this purpose and the total expense incurred by all members of the Faculty.

MEETINGS OF STUDENT ORGANIZATIONS are in general arranged in consultations with the Faculty Counsellors of the organizations.

In case of a meeting which is to be open to students who are not members of the organization or to persons outside of the University, the approval of the University administration should be secured.

MINUTES - Official records of action by the Faculty, the Graduate Board, the College Board, the Academic Council, etc., are filed in the General Office and are open to inspection by members of the Faculty.

MODERN LANGUAGE. See Foreign Language.

NEW COURSES. See Courses and Academic Council.

NURSING EDUCATION. See Bachelor's Degree.

"ON TRIAL"

1. An applicant may be admitted to the University "on trial" at the discretion of the admitting body. In such cases it is usually understood that separation from the University will be automatic if the applicant fails to maintain a satisfactory scholarship record.

2. A student whose record in the University is unsatisfactory may be placed "on trial." This implies grave danger of separation from the University unless the student's performance is substantially improved.

ORAL EXAMINATIONS. See Examinations.

ORGANIZATION OF DEPARTMENTS. See Departments.

ORGANIZATION AND ADMINISTRATION OF THE UNIVERSITY.

ORGANIZATION

1. At the graduate level:

The Graduate School which provides instruction leading to the degrees of Master of Arts and Doctor of Philosophy.

The Graduate School of Geography which provides instruction leading to graduate degrees in Geography.

The Graduate Division of International Affairs which provides instruction leading to graduate degrees in International Affairs.

2. At the undergraduate level:

The College for Men (Clark College) offering a general college course leading to the degree of Bachelor of Arts.

The College for Women offering a general college course leading to the degree of Bachelor of Arts.

The Undergraduate Division of Business Administration offering through the colleges (to both men and women) vocational training, leading to the degree of Bachelor of Business Administration.

3. The Library with an endowment separate from the endowment of the teaching branches of the University.

4. The Art Collection, separately endowed for the preservation and expansion of the art collection of the University.

5. The Clark University Press, associated with the University in the publication of scientific books and journals.

Departments at present offering courses of study are:

*Biology
§Chemistry
#Classics
§Economics and Sociology

- # English Language and Literature
- # Fine Arts
- § Geography
- # Geology
- # German Language and Literature
- § History and International Relations
- # Mathematics
- * Physics
- † Psychology and Education
- # Romance Languages and Literatures

* Undergraduate courses and courses leading to a Master of Arts degree.

Undergraduate courses only.

§ Undergraduate courses and courses leading to the degrees of Master of Arts and Doctor of Philosophy.

† Undergraduate courses, courses leading to the degrees of Master of Arts and Doctor of Philosophy in Psychology and Master of Arts in Education.

The Departmental offerings are supplemented by courses in Philosophy, and in Health Education for Women.

Courses in drawing and painting, in music and in the cultural development of various peoples are offered in the Department of Fine Arts.

Courses in business administration are offered under the direction of the Undergraduate Division of Business Administration.

ADMINISTRATION

The Board of Trustees. Final authority in the University is lodged in the Board of Trustees by charter granted by the General Court of the Commonwealth of Massachusetts.

The President of the University is the executive officer for the Trustees in respect to both the educational activities of the University and the maintenance and use of the physical plant and equipment.

The following officers are responsible directly to the President:

The Librarian
The Director of the Graduate School of Geography
The College Dean
The Heads of Departments of Instruction
The Recorder
The Bursar
The Director of Public Relations
The Custodian of Buildings and Grounds

The Assistant Treasurer is the agent of the Trustees and of the President in business matters which directly concern the current use and maintenance of University property.

The University Faculty has immediate supervision over the general educational work of the University and is responsible for the nomination to the Board of Trustees of candidates for baccalaureate degrees and for honorary degrees. It may delegate such duties as seem appropriate to either the Graduate Board or the College Board.

The Faculty consists of the President, the Librarian and all members of the Staff giving regular courses of instruction.

The University Senate consists of the President, as chairman, and not less than six members of the Faculty appointed by the President.

Its duties are to "advise the President with regard to questions of general policy and such other matters as may be laid before it by the President."

It may bring to the attention of the Faculty and the Collegiate and Graduate Boards for their consideration such matters as fall within the power of action of these bodies.

It may recommend to the Faculty candidates for honorary degrees

The Graduate Board consists of the President as chairman, at least one representative of each department which receives candidates for the Ph.D., and such others as the Board may elect. It is required to provide for representation of any department offering work leading only to the degree of Master of Arts whenever matters affecting such a department are under consideration.

The Board exercises general supervision over all matters pertaining solely to graduate work. In particular it determines requirements for the M.A. and Ph.D.degrees, passes upon the program of each candidate for either of these degrees and recommends to the Trustees, for these degrees, candidates of whom it approves and who have been recommended by the various departments.

The Board also recommends to the Trustees for appointment as Fellows and Graduate Scholars candidates who have been nominated by the various departments.

The official minutes of the Board are open for inspection by any member of the Faculty.

The College Board consists of the President, the College Dean, and six members of the Faculty appointed by the President.

The Board has supervision over the colleges under general Faculty regulations, except in respect to matters specifically assigned to the Academic Council and to the Administrative Committee for the Division of Business Administration.

The Undergraduate Division of Business Administration is responsible for the curriculum in business administration. Its administration is in the hands of the Administrative Committee.

ORGANIZATION AND ADMINISTRATION (cont.)

Standing Committees of the Faculty.

The committee on the Personnel and the Organization of Departments elected annually to advise the President.

The Library Committee.

The Committee on the Summer School.

The Academic Council which is responsible for recommendations to the Faculty concerning the educational policies in the colleges, for the approval of courses of study offered to undergraduates and for the supervision of "honors work," senior surveys and "comprehensive examinations" in the colleges.

The Administrative Committee for the Division of Business Administration.

Standing Committees of the Graduate Board;

The Committee on Credentials passes upon applications for admission to the graduate division and makes recommendations to the Graduate Board in respect to fellowships and scholarships and candidacy for graduate degrees.

The Committee on Proficiency in Foreign Languages conducts the examinations in foreign languages which are required of candidates for graduate degrees.

Standing Committees of the College Board.

The Executive Committee.

The Committee on Admissions passes on applications for admission to the colleges and also on applications for admission as special students.

The Committee on Veterans is responsible for the admission and supervision of "veterans" who are entitled to educational benefits under acts of Congress. This committee ceased to exist by action of the College Board, on Feb. 4, 1949.

The Committee on Athletics has control of Athletics activities in the college.

The Committee on Social Affairs.

The Committee on Student Finances.

The Committee on Fraternities.

The Committee on Publications.

The Committee on Student Personnel.

Standing Committees of the Academic Council:

The Executive Committee

The Committee on Curriculum passes upon all new courses of study for undergraduates and all material modifications of existing courses. It either approves of the offerings or refers them to the Council for further consideration. The Committee also gives constant attention to the undergraduate curriculum and makes recommendations concerning it to the Council.

The Committee on Honors Programs.

ORGANIZATIONS OF STUDENTS.

All undergraduate students are organized in the Student Body for Men and the Student Body for Women, also in the separate "class" organizations for men and for women.

The rules for eligibility apply strictly to officers of these organizations.

There are two senior honorary societies, Gryphon for the men and Pleiades for women.

In addition there are numerous other organizations which bring together students or students and Faculty who have some common interest.

Each such organization is required to choose a Faculty Counsellor.

The use of the name "Clark" in connection with a student organization is subject to approval by the College Board.

"OUTSIDE WORK." See Program, Teaching Load, etc.

Outside work by a graduate student is under the joint control of the major department and the Graduate Board.

Outside work by college students is under the control of the College Board.

OVER-CUTTING OF CLASSES. See Absences.

PART-TIME STUDENT. In general, a student who is enrolled in less than a full program of courses. An undergraduate, however, does not come under this classification until his program consists of fewer than four courses.

A part-time student pays tuition on the basis of the number of courses in which he is enrolled at the rate of one-fifth of full tuition for each course.

A part-time undergraduate is not required to pay the activities fee and is excused from physical training requirements and from attendance at the weekly assembly.

A part-time undergraduate is not eligible for participation in extra-curricular activities unless his program permits him to graduate at the end of the current year.

PASSING. PASSING GRADE. See also Failure. The University has not officially defined the meaning of "passing" and has not specified a method by which passing must be determined. The meaning is implied in the definition of "failure."

A course must be "passed," and under certain conditions must carry a grade above the lowest passing grade, in order to yield credit toward a degree or to meet specified subject-matter requirements.

The Faculty has not specified the weight to be given to a final examination in determining the final grade in a course.

In graduate courses, passing is usually indicated by P, satisfactory.

In undergraduate courses, A+, A,--------D, D- are passing grades.

PATRIOTS DAY. (April 19). Not a holiday.

PENSION. See Retirement.

PERSONNEL AND ORGANIZATION OF DEPARTMENTS, COMMITTEE ON. A standing committee of the Faculty established by action of the Board of Trustees.

The committee is elected annually under rules adopted by the Faculty.

Its duties are to "advise the President on all recommendations from the several departments regarding the personnel and organization of their respective staffs."

PETITIONS for special action affecting individuals as students in the college or affecting groups of students come before the College Board.

In the case of an individual, the petition must carry the signature of the student's adviser. The adviser's signature on a petition is interpreted to mean that the substance of the petition has been discussed with him and that he is satisfied with the form in which the request is presented. It does not imply approval of the request. A written comment by the adviser is helpful to the Board.

PHILOSOPHY. There is not at present (1949-50) a department of Philosophy and undergraduates are not normally accepted as majors in this subject. A group of four courses is currently offered.

PHYSICAL EXAMINATIONS. Each college student is given a physical examination by one of the Medical Directors at the beginning of each academic year. Records of these examinations are kept in the office of the Director of Physical Training.

PHYSICAL TRAINING is required of all college students for two hours a week through three years, except in the case of "veterans."

Excuse from this requirement is normally granted only on the advice of one of the Medical Directors.

Physical training is scheduled so as to avoid interference with a student's program of studies.

Special regulations apply to absences from scheduled physical training appointments.

PLACEMENT EXAMINATIONS are given by a number of departments to undergraduates when they enter the college in order to facilitate the assignment of individuals to class work at the proper level.

These examinations are usually given during the "induction period."

PLEIADES is the senior honorary society for women. Its purpose is to further the ideals for which Clark University was founded. Members are elected from the junior class.

PRACTICE TEACHING for candidates for the Master's degree in education is provided by arrangements between the University and the public schools in nearby communities.

PRE-DENTAL PROGRAM. See Pre-medical Program.

PRELIMINARY EXAMINATION. See Doctor of Philosophy.

PRE-MEDICAL PROGRAM. A college student who expects to enter a medical school or a dental school should major in either Biology or Chemistry. He must meet the regular requirements for an A.B. degree and should plan his program, with the help of his adviser, to meet the requirements of the professional school.

PRE-REQUISITES for admission to certain courses are stated in the description of the courses in the University Catalog.

PRESS, THE CLARK UNIVERSITY. See Organization and Administration.

Formerly active in the field of publication, the Press is at present (1949-50) largely concerned with the distribution of material published at an earlier date.

PRESS, PUBLIC. Information to the public press concerning university affairs is regularly channeled through the Director of Public Relations.

It is of primary importance that all publicity directly affecting the University should be cleared through the university administration.

In accordance with a resolution adopted by the Faculty, information regarding faculty meetings or directly related thereto shall "be made public only by the Secretary of the Faculty when authorized by the President or by vote of the Faculty."

PRIZES.

The Prentice Cheney Hoyt prize in Poetry ($15.00) is awarded annually by the department of English for the best poem by an undergraduate.

A prize in Greek offered by the Ahepa Society is awarded at Commencement time.

PROBATION. The colleges, prior to 1949, did not use this term in a technical sense implying definite restrictions or a sequence of further actions. When the term was used it implied serious dissatisfaction with a student's performance and the possibility that he might be required to withdraw from the college.

By action of the Faculty, 5 May, 1949, any college student is to be placed "on probation" if his record falls below a specified standard and is to remain on probation until his record for a semester meets a prescribed standard.

A student who is on probation is to be systematically helped to regain a satisfactory level of attainment and is to be separated from the college if in spite of such help, after a reasonable time, he is unable to bring his record above the probation level.

PROCTOR (Men's dormitory). A member of the Faculty who lives in Estabrook Hall and has general responsibility for the human side of dormitory life.

A similar function with certain added responsibilities is exercised by the "House Mothers" in the women's dormitories.

PROCTOR (collective final examination).

All members of the Faculty are expected to be available for proctoring duties in connection with final examinations.

A schedule of proctoring assignments is prepared by the Committee on Final Examinations sufficiently in advance of the examination period so that adjustments can be made when necessary.

It is the duty of proctors to see that regulations for the conduct of the examinations are observed, to reduce to a minimum any conditions which might be unfavorable to the students who are being examined and "to maintain constant vigilance against dishonesty.

The head proctor for each period is in general charge of the examinations for that period. He makes necessary announcements, sees that examination questions are on hand and that proper seating arrangements are observed. He is also responsible for the delivery of completed examination papers to the instructors concerned or to the general office.

He must observe and take necessary action in regard to any cases of suspected dishonesty and make a report of such cases to the College Board.

Assistant proctors carry out such duties as are assigned to them by the head proctor and report to him any cases of suspected dishonesty.

Alternates for a particular examination period should be on hand or be readily available so that they may fill without delay any vacancies in the list of proctors for that period.

PROFESSOR. Associate professor. Assistant professor.

In general, an initial appointment to the rank of assistant professor is for a term of two years and may be renewed for like periods.

After a maximum of three such appointments an assistant professor is normally either (a) given permanent tenure, with or without promotion in rank, or (b) is notified that there is no prospect for continuing need of his services.

In the latter case a terminal one-year appointment may be given.

Promotion from the rank of instructor to assistant professor does not necessarily involve an implication of permanent tenure.

Promotion to the rank of associate professor after as much as six years of service normally involves permanent tenure.

Appointments to the ranks of associate professor or professor are normally made with due regard to the appointee's fitness for permanency. When such appointments involve an agreement for a probationary period, this may be followed by a one year terminal appointment in case of a decision not to make the appointment permanent.

PROFICIENCY IN ENGLISH. See English.

PROGRAM OF STUDIES.

1. A graduate student's program is determined in conference with the department in which he plans to do his major work.
2. An undergraduate normally carries a program of five courses in addition to required physical training.

A program of six courses or of fewer than five may be authorized by the College Board.

A program of six courses may be permitted -

- a. for a freshman in his first semester of residence.
- b. for a senior whose graduation depends on the completion of a six-course program and whose average grade for the preceding semester is C- or better.
- c. for any student whose average grade for the preceding semester is C+ or better.

A student whose program consists of fewer than four courses is automatically classified as a part-time student.

Two courses carried concurrently constitute a regular program in the Clark University summer term.

In the freshman year the program of an A.B. candidate includes English, a foreign language, a course each in Group A and in Group B and an elective. (Mathematics for anyone who expects to choose a major in Group A).

The freshman program for B.B.A. candidates is fully prescribed.

In the sophomore year any first year requirements which have not been completed must be given preference and provision must be made for progress in the major subject.

In the third and fourth years the program is largely elective for an A.B. candidate, subject to the demands of his major subject and the obligation to give preference to any general requirements not yet completed.

After the choice of an "area of concentration" the program for a B.B.A. candidate is largely prescribed.

In making up a student's program it is important to note that certain courses are indivisible and others are offered only in alternate years or at irregular intervals. Certain courses are restricted to members of designated college classes only. Some courses yield only partial credit when not taken at a specified time.

PROGRAM. Teaching Program. A normal teaching program as established by usage consists of three or four courses conducted simultaneously.

PROGRAM (cont.)

The three course program prevails more frequently in the case of Faculty members who devote at least half of their time to graduate instruction.

Variations from the normal program to take account of special conditions are normally arranged by a department in consultation with the President.

A member of the Faculty may be permitted to teach not more than the equivalent of one additional course in extension teaching or temporary teaching in another institution.

PROMOTIONS. See Appointments and Promotions.

PSYCHOLOGY AND EDUCATION, DEPARTMENT OF. The department offers work leading to the A.M. and Ph.D. degrees in Psychology and to the "Master of Arts in Education." It does not accept candidates for the Ph.D. degree in Education.

A college major is offered in Psychology, but not in Education. A five year program including one year beyond the requirements for a bachelor's degree leads to a "Master of Arts in Education."

PUBLIC MEETINGS conducted by student organizations. See Meetings.

PUBLICATION OF DISSERTATIONS AND THESES.

In the earlier days of the University each recipient of the Doctors degree in course was required to publish his thesis and to present copies of the University Library.

At present approved abstracts of both dissertations and theses must be published. Publication is provided by a publication fee which is paid before a student is admitted to candidacy for a degree. A special number of the Clark University Bulletin containing abstracts for the previous year is published annually.

PUBLICATIONS, UNIVERSITY.

The Clark University Bulletin is published five times during the academic year. It includes the annual catalog, the announcement of the Summer School, and the President's annual report.

Library publications are issued on special occasions at irregular intervals.

The college issues a Student's Handbook ("the Freshman Bible") at the beginning of each academic year.

Certain publications issued at an earlier date by the Clark University Press are offered for sale by the Press.

PUBLICATIONS, by members of the Faculty and former students.

A special collection of books and other publications by members of the faculty and former students is maintained by the Library, apart from its general collection. Individuals are urged to report their publications to the Librarian and to supply, if possible, copies for this collection.

PUBLICATIONS, STUDENT.

Currently (1948-49) a weekly newspaper, The Scarlet and a yearbook (The Pasticcio), are edited and published by the students under the supervision of the committee on Publications of the College Board.

These publications are subsidized by the activities fee.

PUBLICITY. PUBLIC RELATIONS. See Press, Public.

PURCHASES, by departments, of equipment and supplies should be made through the Bursar's office.

QUALITY REQUIREMENTS FOR A BACHELOR'S DEGREE. See Bachelor's Degrees.

QUORUM for Faculty meetings. During the academic year, one more than half the number of Faculty members in residence is a quorum for the transaction of business by the Faculty.

RANK OF A STUDENT in his college class or other group.

The rank of a student is determined by his average grade.

Rank lists are prepared by the Recorder and are regularly used in connection with award of scholarships, admission to candidacy for departmental honors, awards of annual honors and of the bachelor's degree with honor, etc.

READMISSION OF STUDENTS who have been required to withdraw from the college is at the discretion of the College Board.

By action of the Faculty, 5 May, 1949, the readmission of students who have been required to withdraw is discouraged.

RECESS. See Calendar.

RECORD. ACADEMIC RECORD OF A STUDENT. See also Transcript.

Records are kept by the Recorder and are available for inspection at any time by members of the Faculty.

A student may, for good cause, check his individual record at any time.

RECORDER. The University Recorder has the primary duties of caring for the registration of student's programs of studies, maintaining academic records of students and issuing official statements of students' records.

In addition, the preparation of time schedules for courses and for final examinations, assignment of rooms for class meetings, classification of students, the preparation of reports and numerous other important duties center in the Recorder's Office.

REFUNDS, to students. See Fees and Deposits, Dining Hall.

The following regulation was adopted by the trustees on March 28, 1931: "No refund of tuition and no release of obligation to pay tuition shall be made because of failure for any reason on the part of a student to complete the work of any semester after it is begun."

REFUNDS (cont.)

The diploma fee is returnable to a student who ceases to be a candidate for a degree.

Publication fees are also returnable.

REGISTRATION. See also Change of Program.

Each student is required to register for a program of studies before entering on class work at the beginning of any semester. A special day is set aside for registration.

Registration is supervised by the Recorder.

Undergraduates are subject to a charge for registration later than the designated Registration Day.

REORGANIZATION OF THE UNIVERSITY.

A thoroughgoing regorganization of the University, graduate school and college, involving the fusing into a single Faculty of two previously existing independent Faculties, occurred in the spring of 1921. See the minutes of the Faculty.

REPORTS OF COMMITTEES should always be in writing and should be delivered to the secretary of the body to which the committee reports.

Long or involved reports on which action is necessary should be mimeographed so that copies may be placed in the hands of all persons concerned with action on the report.

REPORTS, DEPARTMENTAL. Each department, toward the end of the second semester, submits an annual report to the President covering the operations for the current academic year and recommendations for the future.

REPORTS OF GRADES TO RECORDER. See Grades and Grading.

Reports are required on or before designated days both at mid-semester and at the end of each semester. Report sheets containing class lists are provided by the Recorder.

Prompt reporting, especially after final examinations at the end of a semester, is a matter of great importance. The time available for recording, checking against requirements, calculating average grades, etc. which must be done before the end of the semester is always less than is needed. Any unnecessary delay at this time increases the possibility of serious errors.

REPORTS OF GRADES TO UNDERGRADUATES. See Grades and Grading.

After mid-semester reports in both semesters and after the end of the first semester report cards are placed in the hands of advisers for delivery to their advisees.

The distribution of these cards provides a valuable opportunity for conferring with the advisees.

Semester reports are mailed to students after the end of the second semester.

REQUIREMENTS FOR ADMISSION. See Admission.

REQUIREMENTS FOR A DEGREE. See Doctor of Philosophy, Master of Arts, Bachelor's degrees.

RESIDENCE. STUDY IN RESIDENCE. See Bachelor's degree, Master of Arts, etc.

Residence implies work done at Clark University with the approval of the Graduate Board or of the College Board under the immediate personal supervision of at least one member of the Faculty.

Field-work in certain subjects under the personal direction of a member of the Faculty may be counted as study in residence.

At least one year of full-time study in residence at Clark University, or its equivalent, is a prerequisite for any degree from the University. The equivalent may be an authorized combination of Summer School study, part-time study, and field trips.

RESIGNATION OF A MEMBER OF THE FACULTY. There are no formal rules applying to resignations. The Faculty is on record as approving the principles embodied in an official statement on "resignations" by the American Association of University Professors.

RESERVED books, in the University Library are books withdrawn from general circulation at the request of an instructor and held in the Library so that they may be equally accessible to all members of a specified course.

Reserved books may be withdrawn for individual overnight use or for use at other times when the Library is closed.

RETIREMENT, of member of the Faculty.

A member of the faculty on "permanent tenure" may retire from active service voluntarily or may be retired by the Board of Trustees after reaching the age of 65 and until he reaches the age of 70. Retirement is obligatory at 70 subject to the provision that the Trustees may continue the services of an individual beyond the age of 70 or a year to year basis.

In the application of rules stated above, the provisions for retirement normally become effective at the end of the academic year in which the specified age is reached.

Retirement allowances have to the present (1948-49) been provided largely by the Carnegie Foundation for the Advancement of Teaching, supplemented by annuities provided by the University.

In the future retirement incomes will be chiefly derived from annuities paid for jointly by the University and by the instructor - each contributing 5% of the instructors salary annually (1949).

Participation in this plan is a condition for employment by the University.

SABBATICAL LEAVES. A plan of sabbatical leaves at the end of each six-year period of service was in operation at the University from about 1923 to 1932. See minutes of Faculty, p. 54. Operation of the

SABBATICAL LEAVES (cont.)
plan was terminated by action of the Trustees.

SALARIES. Salaries of members of the Faculty are paid on the first day of each month beginning October 1st.

Payment is made in nine or in twelve equal installments at the option of the recipient.

There is, at this date (1949-50) no officially announced salary scale or range of salaries within each faculty rank.

SATURDAY COURSES. Regular courses which are particularly interesting to teachers in service are frequently given on Saturday. Such courses usually meet for a two-hour period.

Extension courses have also been offered in this manner.

SCHEDULE OF CLASSES. A schedule giving the place and time of meeting for each course is issued by the Recorder prior to the beginning of each semester.

These schedules are arranged in consultation with the departments.

Individual and departmental preferences are of necessity subordinate to the demands of the overall schedule - established workable schedules cannot be too seriously disturbed, certain conflicts must be avoided, the availability of suitable rooms must be considered and class meetings must be reasonably distributed over the entire working period.

It is a matter of tradition that undergraduate class meetings occur, for the most part, in the forenoon, laboratory exercises, in the afternoon.

SCHOLARSHIP SOCIETY. The Clark Scholarship Society was organized in 1914. Its object is, "to maintain a high and broad conception of scholarship; to encourage devotion to scholarship, so conceived; to promote a close relation for mutual benefit between the undergraduate members and the faculty members of the society."

Membership in the society is open to members of the faculty.

Student members are elected at the end of the junior year from students with highest standing in the junior class. Additional members may be elected at the middle and at the end of the senior year.

SCHOLARSHIPS. See Fellowships and Scholarships.

a. Graduate scholarships are available for students in the earlier years of graduate study, primarily for those who expect to proceed to a Master's degree.

   Applications should be made through the department concerned.
b. Undergraduate scholarships in varying amounts are available for entering students and for those who have been in residence for a semester or more.

   Applications should be addressed to the Dean.

SCHOLARSHIPS (cont.)

Undergraduate scholarships are awarded on a semester basis, but an award for the first semester is ordinarily continued through the second semester if the recipient maintains a scholarship record which places him in the upper half of his class.

The amount of a scholarship award is deducted from the student's tuition bill.

SCIENCE. One or more units of science in addition to Mathematics are usually included in the record on which admission to the college is based.

Two courses in science (Group A) one a laboratory course, are required for the A.B. degree.

SCIENTIFIC SOCIETY AND SIGMA XI CLUB. An organization of members of the Faculty, graduate students and selected undergraduates who are interested broadly in Science.

Meetings, some of which are open to the public, are held monthly during the academic year.

SECRETARY OF THE FACULTY. The secretary of the Faculty calls meetings of the Faculty as required, keeps minutes of Faculty meetings, prepares an agenda which is distributed in advance of each meeting and performs other related duties.

Copies of all reports of faculty committees should be filed with the Secretary in writing.

SENATE. UNIVERSITY SENATE. See Organization and Administration.

SENIOR. See Classification of Undergraduates.

SENIOR SURVEY. A type of course designed to unify and broaden a student's understanding of his major subject and to prepare him for a comprehensive examination under a plan adopted by the Faculty in 1942 but never put into into effect.

Something having the same general purpose is under consideration in connection with a new plan for comprehensive examinations adopted in 1949.

SEPARATION OF A STUDENT FROM THE UNIVERSITY. The University reserves the right to require the withdrawal at any time of any student whose record in either conduct or scholarship fails to meet the expectations implied by his admission.

Withdrawal, voluntary or involuntary, does not entitle a student to a refund of tuition.

SIX-COURSE PROGRAM. See Program of Studies.

SMOKERS. (informal meetings) Faculty smokers are held from time to time for the discussion and clarification of questions of policy. Formal faculty action is not taken at smokers.

SMOKERS (cont.)

Fraternity smokers are a traditional feature of the campaigns aimed at interesting students to become pledges of the different fraternities.

SMOKING. The University is under certain obligations imposed by the fire insurance regulations in respect to smoking in university buildings.

These do not interfere with smoking in the private offices of instructors.

Smoking is normally not permitted in undergraduate class meetings. In small advanced courses it is sometimes permitted.

SOCIAL AFFAIRS. See Activities.

SOCIAL SCIENCES. Two courses in Social Science (Group B) are required for the A.B. degree.

SOPHOMORE. See Classification of Undergraduates, Program of Studies, etc.

SPEAKERS FROM OUTSIDE THE UNIVERSITY. See Meetings of Student Organizations.

SPECIAL GRADUATE STUDENT. A student admitted to the Graduate School but not to full graduate student status. A special graduate student may not be admitted to candidacy for a graduate degree. Such students may however be reclassified, at the direction of the Graduate Board, as regular graduate students.

SPECIAL STUDENT. A person, not a prospective candidate for a degree, who wishes to take advantage of the educational opportunities offered by the University may be admitted by the College Board as a special student - except that a holder of a bachelor's degree who wishes to enroll in a graduate course is not eligible for the special student classification. Such persons must apply to the Graduate Board.

A record of courses completed by a special student does not carry credit toward a degree.

A special student is not a member of the College even though he is under the supervision of the College Board. His participation in college activities is in general, limited to those activities to which the eligibility requirements are not applicable.

A special student pays the matriculation fee. His tuition is based on the number of courses for which he registers. He is not required to attend the weekly Assembly or to meet the requirement in physical training.

A special student who enrolls in more than three courses is required to pay the activities fee.

SPECIALIZATION in particular fields of study.

Specialization is of course the essence of graduate study.

SPECIALIZATION (cont.)

Undergraduate specialization, to a limited degree, is provided for in the requirement of a major and in the program for the B.B.A. Undue specialization at the expense of a broad basic education is guarded against in the A.B. program by special "distribution requirements."

SPREE, SPRING. See Spring Spree.

SPRING RECESS. See Calendar.

SPRING SPREE. A day taken from classes by the college students, usually after the weather has become warm, for a frolic marked by various competitions and other forms of amusement.

The general management of "spree day" is in the hands of Gryphon.

Great care is exercised to avoid having the chosen day known until students and Faculty report for the first classes on that day.

While in theory Spree Day is taken in defiance of the Faculty it has become a firmly established custom for the Faculty to join with the students in the day's activities.

STAFF OF THE UNIVERSITY. A general inclusive term, not precisely defined, including administrative officers, Faculty, Bursar, Recordder, Medical Directors, etc.

STATISTICS OF ENROLLMENT. See the University Catalog.

STUDENT ORGANIZATIONS. See Organizations.

STUDENT-FACULTY COUNCIL. A body composed of the college Dean, two members of the Faculty and four students. Its functions are to consider problems of general interest and to make recommendations to the proper authorities.

STUDENT PUBLICATIONS. See Publications.

SUMMER SCHOOL. SUMMER TERM. Informal summer sessions primarily devoted to the field of education were conducted by the University between 1892 and 1903.

A Summer School was conducted for six weeks in each summer from 1921 to 1941. Both graduate and undergraduate courses were offered.

In 1942 a twelve-week Summer Term, divided into six week sessions was made a normal part of the college year for undergraduates in the accelerated program. Graduate courses were also offered. The twelve-week Summer term will be discontinued after 1949.

It is probable that a Summer session shorter than twelve weeks will be offered in 1950 and thereafter.

SUMMER STUDY COURSES. A plan designed to develop intellectual independence in college students and to serve other purposes. Courses of study, to be completed independently during the summer vacation, were carefully outlined in advance and checked by written reports and/or examinations in the fall. Such courses were used in Clark College for a few years beginning in 1919.

SUPPLEMENTARY WORK in connection with a regular course for the purpose of earning additional credit may be permitted in special cases by the College Board or by the Graduate Board.

SURVEY, SENIOR. See Senior Survey.

TARDINESS of undergraduates at class meetings. In case of tardiness, the entire responsibility for avoiding a record of absence rests on the student.

One or more tardinesses may be reported as an absence, at the discretion of the instructor.

TEACHER TRAINING is provided in a five-year program offered by the departments of Psychology and Education. This program leads to the degree of Master of Arts in Education, following the A.B. degree.

TEACHING FELLOWS. See Fellowships and Scholarships.

TEACHING LOAD. The traditional teaching load of members of the Faculty is three or four courses with three courses predominating in the case of instructors with large responsibilities for graduate work.

TENURE. PERMANENT TENURE. The Faculty, the President and the Trustees are on record as approving, in principle, the statement on Academic Freedom, Tenure and Resignations contained in the "Statement of Principles, 1940" published in the Bulletin of the A.A.U.P., Bull. XXXI, 116-119.

TERM. The two terms into which the regular academic year is divided are officially designated as "semesters."

From 1942 to 1949 inclusive a twelve-week Summer Term, divided into two six-week sessions, was added to the regular academic year to provide for an "accelerated program" for a bachelor's degree.

For the year 1943-44 while the University was operating on the Army program (A.S.T.P.) the regular academic year was divided into three terms of twelve weeks each.

TESTS. (informal examinations) Frequent tests are customarily given in each course in order to provide information on which the final grade in the course may be based.

A test may occupy the whole of a class period or any part of the period and may be announced in advance or not at the discretion of the instructor.

A student who for any reason is absent from a test may be required to "make it up" in any reasonable manner.

THANKSGIVING RECESS. See Calendar.

THESIS. See Master of Arts.

THREE YEAR PROGRAM FOR THE A.B. DEGREE. See also Accelerated Program. From the opening of the college in 1902 until the end of the academic year 1921-22 the normal residence requirement for the A.B. degree was three academic years with a course program of eighteen semester hours.

Under the present four year plan students with the requisite intellectual ability and physical stamina are still given the opportunity to complete the course in three years. This involves a six-course program throughout three years supplemented by two additional courses which can usually be taken in an approved summer school.

TRANSCRIPT OF RECORD. Official statements of record are issued by the Recorder to matriculated students only.

A transcript gives the academic record and current status of a student in Clark University. It does not carry a detailed statement of work done elsewhere in the case of students who have transferred from another college.

Two transcripts are issued without charge. Additional copies cost $1.00 each.

TRANSFER OF CREDIT. Credit earned elsewhere may be applied toward a degree in Clark University only when it is approved by the department concerned and authorized by vote of the Graduate Board or of the College Board.

Such credit is always accepted conditionally, i.e., it is not recognized as credit in Clark University until its inclusion in the student's record completes the requirements for a degree.

Transfer of credit from Clark University to another institution is based on an official transcript of record which is issued by the Recorder and is subject to the regulations of the other institution.

TRANSFER OF STUDENTS. See Admission to the University.

TRAVEL to meetings of professional and scholarly societies. See Meetings.

TRIPS. See Meetings, Field Trips, etc. Field trips for instructional purposes and trips away from Worcester by athletic teams and other undergraduate student organizations require approval in advance by the College Board.

Necessary absences incurred on an authorized trip are reported to the Recorder by the officer of the college in charge of the trip; and are recorded as "excused."

TRUSTEES. See Organization and Administration.

All official communications between the Faculty or individual members of the Faculty and the Board of Trustees are required to go through the office of the President.

TUITION in the University has been kept as low as possible in accordance with the expressed wish of the founder.

TUITION (cont.)

For other than a regular full program tuition charges are based *pro rata* on the number of courses for which the student is registered, except that a college student with a program of four courses pays full tuition.

Children of members of the Faculty and Staff receive remission of tuition but pay the incidental fees.

UNDERGRADUATE SCHOOL. See *Colleges*, *Bachelor's Degrees*, etc.

UNIT OF ACADEMIC WORK. For admission to college a unit of preparatory school work normally represents approximately one quarter of a regular school program for the year.

For college work, see *Course*.

VACATIONS. See *Calendar*.

VETERAN, as used in university regulations, refers to former members of the armed forces who are eligible for benefits under Public Laws 16 or 346 as amended by Public Law 268.

VETERANS, COMMITTEE ON. A standing committee of the College Board from 8 March, 1945 until 4 February, 1949.

VISITATION COMMITTEE. See *Committee on Instruction*.

VOCATIONAL PROGRAM. See *Bachelor of Business Administration*.

WITHDRAWAL FROM A COURSE. See *Change of Program*.

WITHDRAWAL FROM THE UNIVERSITY. See *Separation from the University*.

WOMEN'S COLLEGE. See *Colleges*.

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The President's Report

1948 – 1949

WORCESTER, MASSACHUSETTS

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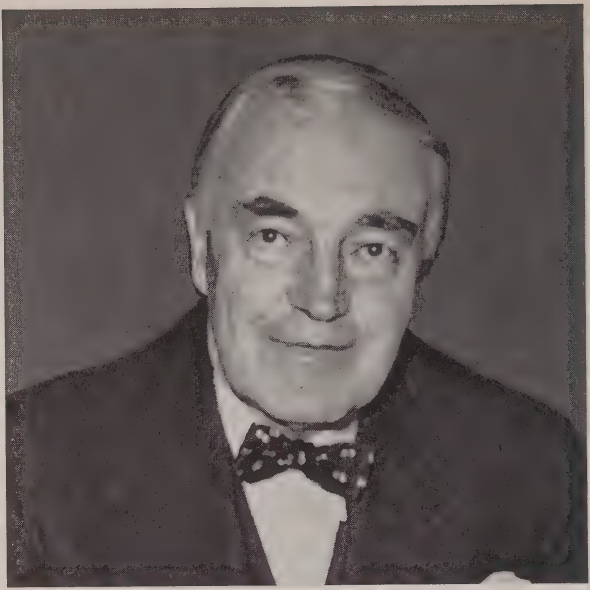


WALLACE W. ATWOOD, 1872–1949
President, 1920–1946

W. ELMER EKBLAW, 1882–1949
Professor of Geography

ERNEST R. WHITMAN, 1882–1948
Director, Physical Education

CLARK UNIVERSITY

The President's Report for 1948-1949

Sixty years ago—October 2, 1889—Clark University was formally opened. The first students were in residence. It may not be entirely accurate to use the term "students" in describing these mature people who first came to Clark for instruction and creative research. At least President Hall was careful to point out in his first report that the institution was not a "graduate department in which most so-called graduate students attend, and most professors conduct undergraduate work." He thought of the enterprise in those early days as primarily a school for professors. All but two of the "students" had engaged in university work for one or more years following their graduation from college.

One of the most distinguished faculties ever assembled was on hand to offer guidance in advanced work. Merely listing the names of some of the members of that group attests to its quality: Story and Bolza in Mathematics, Michelson in Physics, Nef in Chemistry, Whitman and Donaldson in Biology, Boas in Anthropology, Hall and Sanford in Psychology.

Neither then nor at any later time was there an attempt to cover all fields of knowledge. The organization of subject matter reflected the great scientific interest of the late nineteenth century. First was Mathematics which was looked upon as the queen of the sciences. Other subjects in the original organization were Physics, Chemistry, Biology, and Psychology including Neurology and Anthropology. Probably there was some hope that work might be extended to the humanities and that eventually some professional schools might be added. Circumstances which are now well known prevented this kind of development. On the other hand, President Hall seemed to believe that the organization of advanced studies in America might be better furthered by having a division of labor among universities. He writes in his first report: "We must not attempt at once to cover the entire field of human knowledge, but must elect a group of related departments of fundamental importance, and concentrate all our care to make these the best possible. Each science has become so vast and manifold that it is impossible to cultivate the frontier of all at a single university. This is more and more recognized abroad, and is still more true under our American system of private endowment than on the European plan, with a national treasury to draw from. If coming universities, instead of imitating, will supplement others, will elect each its group of studies, all the gain in economy and effectiveness which skilled labor has over unskilled will be secured in the field of highest education."

This point of view was emphasized also in a resolution adopted by the Board of Trustees, to the effect that the strength of the University should always rest, not upon the number of subjects, nor the breadth or length of its curriculum, but upon its thoroughness and its unity.

The Small University

There is abundant evidence that Clark, as a small university, made a tremendous impact upon American education in the past. On the occasion of the decennial celebration, William James sent a congratulatory letter, saying that "all the refinements of the world seem now to take refuge in the smaller things; the bigger ones are getting too big for any virtue to remain in them. You have done something original and succeeded perfectly." This can be looked upon as an eminently true appraisal of the situation in 1889 or in 1899. What of the place of the small university at the present time?

During the past sixty years the development of American universities has taken a different course from that proposed by President

Hall. A typical university today has not selected a particular group of studies for concentration. On the contrary, it is a large and complex organization, including a college of liberal arts, a graduate school providing advanced studies in all of the arts and sciences, and a cluster of professional and technical schools. Clark, on the other hand, has not developed along these lines. It has added to its organization an undergraduate college but it has continued to the present day to limit its advanced work to a few selected fields. Is there a place for a small university of this type in the educational pattern of America?

While I have no doubt that the answer to this question should be in the affirmative, it seems that my conviction is not universally shared. The American mania for bigness and the penchant for mass production have made their imprint upon American education. Resistance to these tendencies has been maintained more successfully by the liberal arts college than by the university. The place of the small liberal arts college is secure in our scheme of things, but there is a regrettable tendency to think of university work as concentrated in a few large centers.

It is not difficult to understand the desirability of having a number of small undergraduate colleges where there is still the possibility of personalizing education and of close contacts between students and faculty. These values are particularly apparent in these days when the methods of mass production have reached absurd proportions. There are institutions in which a professor may lecture to a class numbering over a thousand and thus can make no pretense of dealing with the individual student. There is a widespread conviction, therefore, that the small colleges have decided advantages and that they must remain a permanent part of our system.

It seems strange that a similar conviction has not been maintained with respect to the small university. It should be obvious that individualized instruction is even more important as we move from the undergraduate level of education, which is largely receptive, to the graduate level which ought to be characterized by independent and creative work. There seems to be a clear danger that habits of passivity and mere receptivity will persist even among graduate students if they are to receive their instruction in large lecture courses and go through an elaborate Ph.D. mill.

In his *Studies in Early Graduate Education* (dealing with Johns Hopkins University, Clark University and the University of Chicago), W. Carson Ryan of the Carnegie Foundation for the Advancement of Teaching said that "there seems to be justification for the impression that huge numbers do generally result in elaborate machinery and organization, and that these in turn make it very difficult for even those research workers most concerned with individual students to carry out their ideals."

These handicaps are not to be found in the small university. I am made acutely aware of this in observing the activities of the faculty and students in the Geography field camp and workroom, the History and Economics seminars, and the Chemistry and Psychology laboratories. Mr. Ryan has described the early contribution of Clark in this field and of the leadership given by President Hall. In quoting his words, I would like to emphasize that these conditions prevail here today and that our peculiar approach to graduate education has more significance now than at any time in the past. Mr. Ryan says that "the special Clark contribution to this problem lay not only in small numbers and close personal relations between faculty and students, but also in having as leader a man whose disposition was to keep the human side of a university enterprise uppermost and therefore comparatively free from the elaborate organizational and administrative machinery that interferes with personal relationships in education."

Another advantage of the small university is its freedom to concentrate its energies in those fields where it is equipped to do work of highest quality. It may be that President Hall's hopes for an organization of American university life in which there should be a division of labor was a superior plan to that which has actually taken place. It is extremely difficult for every university to maintain conditions of highest achievement in every field. Yet the typical procedure at the larger centers is to offer advanced work in everything. Clark, on the other hand, has been able to maintain a flexibility in facing new situations. It has been able to drop some activities and institute others when warranted by internal conditions and external demand.

Finally, advanced work of high quality can best be maintained in an institution where there is an atmosphere conducive to scholarship and research. It is extremely difficult to define the ingredients of this atmosphere and it is even more difficult to create them. But one thing is certain. This atmosphere is not brought about merely by bigness or wealth. There is abundant evidence that its heritage has stamped indelibly upon Clark a concern for scholarship and research which takes precedence over everything else. The collective attitude of the institution makes itself felt even among the undergraduates, a large proportion of whom continue their studies beyond college.

These are some of the reasons for my conviction that a university such as Clark plays an extremely important role in American education. We must realize, nevertheless, that to offer graduate work is to engage in the most expensive type of education. Although wealth is not a sufficient condition for genuine university work, it is, unfortunately, a necessary condition. The American people may continue to enjoy the benefits of the small university only if they are able and willing to make available the necessary resources.

Because this is the sixtieth anniversary of Clark's inauguration of university work, we are planning a number of events which will call attention to the place of universities in our national life and also some developments in those fields now represented by our graduate departments. Indeed, one of these occurred last May. Under the editorship of Professor George E. McReynolds of the University of Connecticut and Professor Dwight E. Lee of Clark, a volume of *Essays in History and International Relations* was prepared in honor of Dr. George Hubbard Blakeslee. The fifteen essays were written by former graduate students in the Department of History and International Relations at Clark University. Most of the authors and many other former students, together with friends of the University, were present at a dinner on May 28 when the volume of essays was formally presented to Dr. Blakeslee. In response he spoke of his experiences on our faculty, beginning in 1904, including in his remarks the statement that the first courses in international relations offered in America were given at Clark. He also talked about his more recent work in Washington as a member of the Far Eastern Commission.

Appointments, Promotion and Tenure

For some time the administration and the faculty have been interested in clarifying our procedures in making appointments to the faculty, in recommending promotions, and in placing faculty members on permanent tenure. Although we realize that there are individual cases which cannot be fitted into any rigid pattern, the Board of Trustees during the past year adopted a general norm which will be followed so far as possible. The provisions are as follows:

"All appointments shall be made and shall be accepted subject to the Trustees reserved and continuing right of removal. Recognizing that exceptions may at times make it difficult to adhere to any rigid plan of appointments and promotions, nevertheless the following comprises a normal pattern for Clark University:

1. *Basic Policies*

a. Every appointment to the teaching staff is considered to be made in the interests of the University as a whole as determined by consideration of the over-all objectives agreed upon with respect to the conduct of both undergraduate and graduate education and of research.

b. In the appointment and promotion of members of the teaching staff faculty participation is desirable. For this purpose the President should normally consult the chairman of the department concerned, and the Faculty Personnel Committee.

c. The terms of every appointment should be stated in writing and be in the possession of both the institution and of the teacher concerned.

d. Promotion should be based upon seniority, merit in teaching, scholarly and creative activities, and general institutional and professional usefulness.

e. Promotion in rank should be accompanied by an appropriate increase in salary, to be made, as far as possible, in conformity with a stated salary range within each rank.

f. The teaching staff includes all those who give regular courses of instruction, whether full time or part time. Teaching fellows and assistants are not considered members of the staff under the regulations governing term appointments and tenure.

2. *Term Appointments and Tenure*

a. Instructor

Initial appointment and subsequent reappointments shall be for one or two years. If an instructor is not promoted upon the completion of four years of full-time service or its equivalent, his services should be terminated either at that time or after a further terminal appointment of one year.

b. Assistant Professor

An appointment shall be for a term of two years; and if an assistant professor is not deemed worthy of promotion or tenure after six years of teaching experience, including at least four years at Clark, his service shall be terminated by a final one-year appointment. If at the end of a total of six years of teaching experience, an assistant professor is promoted to an associate professorship, this appointment shall be for "permanent tenure."

c. Associate Professor and Professor

Initial appointment to either of these ranks should be made only upon evidence that the candidate has shown high merit during a period of at least four years of full-time teaching or its equivalent, as a member either of the Clark faculty or of another standard institution. In general an appointment, or reappointment, to these ranks should be made with due regard to the appointee's fitness for permanency.

The initial appointment may be for a term of two or three years, or for permanent tenure if the candidate has already served a probationary period at Clark University. Should the initial appointment be made from outside the Clark faculty, an agreement shall be made in writing concerning the length of the probationary period before appointment on permanent tenure is to be considered. Should the incumbent fail to qualify for permanent tenure, he shall be offered a one-year terminating appointment.

d. Officers of instruction on permanent tenure may be removed only for cause and upon a report on the case to the Trustees by the President after he has consulted with the Faculty Personnel Committee. Any such officer of instruction shall, upon request, be entitled to a hearing before the Board of Trustees or a committee thereof.

In order to carry out these procedures as effectively as possible, arrangements have been made for the faculty to elect from their group six people on permanent tenure to a Committee on Personnel and Organization whose function will be the advising of the President on matters of appointment, promotion and tenure. Members are elected for a three-year period. The first committee to be elected consisted of Professors H. M. Bosshard, H. Donaldson Jordan, Dwight E. Lee, Arthur F. Lucas, James A. Maxwell, and David Potter.

In recommending a member of the faculty for permanent tenure, the Committee on Personnel and Organization has two criteria in mind. The first is evidence, established through several years of service, of outstanding teaching and scholarly ability. The second is evidence of leadership in the affairs of the University as a whole and the ability to share responsibility in the forming of policy. A person on permanent tenure is considered a full partner in the Clark community of scholars with the responsibilities as well as the privileges which that partnership entails.

ACADEMIC FREEDOM

The past year has witnessed a number of positive acts and general trends seriously affecting the principles of academic freedom. Legislation enacted, investigations by legislative bodies, and particularly the request made by the Congressional Committee on Un-American Activities that a number of institutions submit lists of textbooks and reference books used in their courses, have gone some distance in threatening those conditions which make for the kind of freedom so precious to the college professor. Many editorials prompted by the publicity given to the trials at the University of Washington advocated controls on teachers and teaching which we have not known before.

There are many disturbing factors in what has happened during the past year, two of which seem of utmost importance. In the first place, there is evidence of distrust of the teaching profession. It is difficult to avoid the impression that many people believe that real concern for the welfare of our youth is found only among columnists and committees of Congress and the Legislatures, and that these must keep a constant watch on those engaged to do our teaching lest the youth be led astray. There is a double insult in this. On the one hand, the American public does not place a high monetary value upon the teacher. On the other hand, in a time of crisis that same public is inclined to place restrictions on the teacher which it would not place on other citizens, and is inclined to surround his professional activities with threats. Nothing could be more unjust. Since the professor knows that he will not share heavily in the wealth of our industrial society, he obviously does not enter his profession from the profit motive. His real motives are to educate the youth and to seek for truth. He does not wait for a crisis to be concerned about the younger generation. Day in and day out, year in and year out, his professional activity is directed toward the good of the younger generation and he does this work frequently at great personal sacrifice. And the very source of his being as a scholar is the opportunity to seek truth in complete freedom from everything except the moral imperative of intellectual integrity and the highest standards of research. Denial of this opportunity is as severe a blow to the professor as the denial of the rights to use a hospital would be to a surgeon. Rightly understood, if a man is worthy to be a professor in an institution of higher education, there can be no doubt about his loyalty to America. This is the case because his highest loyalty is to truth and to the welfare of America's youth, and there can be no conflict between this loyalty and patriotism unless America, God forbid, plans to base its future policy on a system of lies.

But there is a second disturbing factor in these events of the past year. There is evidence of a growing doubt among us as to the efficacy of the free inquiry into truth. When Thomas Jefferson wrote "If there be any among us who would wish to dissolve this Union or change its republican form, let them stand undisturbed as monuments of the safety with which error of opinion may be tolerated where reason is left free to combat it," he spoke as a product of the Age of Reason. Since the latter part of the eighteenth century, and particularly in our own twentieth century, there has been a steady decline in the prestige of reason, the results of which may have influenced our current attitudes. Some leaders in government and in business are asking us to abandon our trust in free rational inquiry and to set up a rigid policy of political or economic orthodoxy. They would want heretics expelled by force and our colleges and universities turned into centers of indoctrination. With this kind of program the university cannot compromise.

I realize, of course, that many who advocate curbs on rational inquiry are sincere in their desire to achieve national security. But there is a paradox here. We would do well to ponder a lesson from history as told by the late A. N. Whitehead who contrasts the mentality of Greece in its day of glory and the mentality of the later Hellenistic period. The bold rationalism which characterized the golden age of Greece, "by entertaining alternative theories, is superficially sceptical, disturbing to established modes of prejudice. But it obtains its urge from a deep ultimate faith, that through and through the nature of things is penetrable by reason."

On the other hand, "strict attention to accepted methodologies is superficially conservative of belief. But its tone of mind leans towards a fundamental negation." The university can best serve the nation by acquiring a new vitality based on the "deep ultimate faith that through and through the nature of things is penetrable by reason."

STUDENT GOVERNMENT

It is our policy to encourage the students to assume as much responsibility as possible for their own affairs. This can be an important part of the educational process and it can contribute to their own growth and maturity. With this in mind, a student group during the past year, in consultation with members of the administration and the faculty, reorganized the processes of student government and have prepared a new constitution. The program as planned goes into effect this fall.

SUMMER TERM

Since 1942 we have conducted a twelve-week summer term. This was started as a war measure but has continued through the summer of 1949 because so many veterans wished to complete their college work in less than the conventional four years. It seems evident that we have now met the needs of this group of students and thus the long summer term is to be discontinued. Beginning in 1950 there will be a six-week summer term with a new organization of studies. In the first place, it is planned to limit the work to the advanced undergraduate and graduate levels. In the second place, the work will be concentrated in the fields of Geography, Education, History, and Economics. Other subject matter may be added to the curriculum as the needs of our students are more clearly determined.

THE ALUMNI ASSOCIATION

For a good many years Professor Robert S. Illingworth has carried the responsibility of the office of Alumni Secretary in addition to his full-time duties as a member of the faculty. A year ago he felt that he could no longer carry these two positions and also argued very persuasively that the Alumni Association had grown to such dimensions that a full-time Secretary was needed. Accordingly he submitted his resignation which was accepted with reluctance. All alumni are aware of the magnificent work which he has done with the limited amount of time available. The Association searched long and hard for a full-time Secretary, and this fall has appointed, with the approval of the Board of Trustees, Mr. George E. Allen (Clark A.B. '05) of Detroit to that position. Mr. Allen will take over his new duties on January 1, 1950.

DEPARTMENTAL ACTIVITIES

When visiting the alumni groups I have discovered that there is always an interest in developments within the various departments. Because of this interest and because my report is written primarily for the alumni, I shall give a brief summary of the year's work by departments, including comments on physical education and on the Library.

Biology

A small group of unusually gifted graduate students have been working in this department during the year. Although we are not attempting to carry students to the doctorate, we are offering work of the highest quality at the Master's degree level. There have been several publications reporting on research work done in our laboratories, and some of these papers carried the names of graduate students as co-authors. In undergraduate work Professor David Potter and Associate Professor R. F. Nunnemacher have continued to carry the major burden in advising those students who plan to enter medical school. The work in Physiology has been put on a good foundation by the appointment in the fall of 1948 of Assistant Professor John H. Blair.

Business Administration

About 20 per cent of the undergraduates are enrolled in the Business Administration program. As stated in a former report, the organization of the work in Business Administration is not that of a department nor of a special school. Rather it is a carefully conceived sequence of courses taught by faculty members in the various departments. To carry out this procedure effectively calls for skillful management and a cooperative spirit on the part of an appreciable number of teachers. An Advisory Committee, consisting of leaders in business and industry, has been particularly helpful in suggesting ways in which business education may meet the genuine needs of the present day. Assistant Professor Beverly H. Bowman resigned in the Spring of 1948 and he has been replaced by the appointment of Assistant Professor Eugene J. Kelley, formerly of Babson Institute.

Chemistry

We are happy to report that the Chemistry Department has been approved by the Committee on Professional Training of the American Chemical Society. Associate Professor Arthur E. Martell has been granted a year's leave of absence to devote full time to a research project in which he has been interested for some years. He will be working at the University of California. For the duration of his absence, Assistant Professor David J. Stanonis has been engaged to carry on his work. Dr. Richard B. Martin has been promoted from Instructor to Assistant Professor. Associate Professor Donald MacGillavry has continued to direct the work of a navy research project begun in 1947 and he has been assisted by several graduate students. Additional research projects in the department have been reported in the professional journals by Professor Jesse L. Bullock and other members of the staff.

Classics

Because of a surprising interest in the Classics, Assistant Professor Claude W. Barlow has carried a heavy load during the year. In addition to the work offered in Latin and Greek languages, he has contributed to our general education work through a course given in English on Classical Civilization. Furthermore, he cooperated with other members of the language and literature departments in a course offered for the first time last year on Literature and the Nature of Man.

Economics and Sociology

Except for the appointment of Mr. Kelley whose work will be largely concerned with courses in Business Administration, there are no changes in the staff for this year. Mr. H. A. John Green of Oxford University, England, has accepted our invitation to remain for another year as Visiting Lecturer in International Economics. Frederick W. Killian, Associate Professor in Sociology, has been granted a leave of absence for the first semester of 1949–50 to do special research work at the Law School of Yale University. During his absence, one course will be offered by Mr. Clark H. Corliss, Secretary of the Worcester Community Council and another by Mr. Walter A. Olson of the Family Service Organization of Worcester. In addition to the caring for heavy enrollments in undergraduate courses, the department has directed the work of fourteen graduate students. Consideration of the problems of economics and sociology has been considerably enlivened by the practice of inviting outside lecturers to speak before the various classes. Some twenty leaders from America and abroad have given this service during the year.

English

It is with deep regret that I must report the retirement of Professor Loring H. Dodd who, in recent years, has served as chairman of both the English Department and the Fine Arts Department. In addition to his teaching he has conducted during the past twenty-seven years a series of Fine Arts programs at the University each fall. Both the University and the city of Worcester are very happy that he has consented to continue to carry this responsibility. The courses in English have been grouped into three divisions: (1) composition, (2) literature, (3) speech and drama. Professsor Illingworth will have charge of the work in speech and drama, and Karl O. E. Anderson, promoted this year to Associate Professor, has been named acting chairman in charge of the courses in composition and literature. Donald G. Abbott has resigned to carry on advanced studies and William H. Carter, Jr., has been appointed as Instructor. In effecting the reorganization of this department, we were aided appreciably by the suggestions from a Visiting Committee consisting of Professors George Sherburn of Harvard University, Harold H. Blanchard (Clark '16) of Tufts College, and Fred B. Millett of Wesleyan University.

Fine Arts

The instructional work in visual arts has been greatly enriched by the Director and other members of the staff at the Worcester Art Museum. We are particularly grateful to Mr. and Mrs. George L. Stout and Mr. Herbert F. Barnett. They took responsibility for the basic course as well as for advanced creative work. Other courses were offered at the University by Professor Dodd. The main problem was to find a classroom large enough to take care of the great number of students who wished to have the benefit of Professor Dodd's instruction before his retirement. Mr. Samuel P. Cowardin, III, has been appointed Instructor in Fine Arts and assumes his duties this fall. Assistant Professor H. Earle Johnson, in addition to his curricular responsibilities in the field of music, directed a chorus which gave several public concerts during the year. The band was directed by Mr. William Lynch.

Geography

The largest number of students in the history of the Graduate School of Geography was enrolled during the past year. Of a total of fifty-six, twelve were from foreign countries. Despite this large enrollment the members of the staff were able to engage in productive research. During the summer Professor Raymond E. Murphy taught at the University of Colorado and Associate Professor Henry J. Warman at the University of British Columbia. In addition to the work of our regular staff members, a course was offered in Oceanography by Dr. John C. Ayers and Harry J. Turner of the Woods Hole Oceanographic Institute. Furthermore, the following served as visiting lecturers during the year: Dr. Hans Boesch of the University of Zurich, Dr. Wallace W. Atwood, Jr., of the Research and Development Board, Washington, D.C., Dr. Sidman P. Poole of the University of Virginia, Dr. William H. Hobbs, formerly with the Office of Strategic Information, Washington, D.C., Mr. William Applebaum of Stop and Shop, Incorporated, Dr. A. B. Baumont of the University of Massachusetts, Dr. Neville Scarfe of Syracuse University, Dr. Stephen B. Jones of Yale University, and Dr. Charles F. Brooks of Blue Hill Observatory. Dr. Ralph Olson of the University of Oklahoma was a member of the Summer School faculty. Professor Samuel Van Valkenburg attended the International Congress of Geography at Lisbon, Portugal, in April and read a paper in which he presented a plan for an Inventory Survey of Backward Areas. This created such interest that UNESCO has declared itself willing to finance a meeting of a committee to consider the plan in greater detail. The meeting will take place at Clark from December 5 to 17. Members of the committee are: Pierre Gourou (France), Leo Waibel (Brazil), Dudley Stamp (Great Britain), Hans Boesch (Switzerland), with Professor Van Valkenburg as chairman. Following the meeting in Lisbon, Professor Van Valkenburg engaged in political geography field work in Europe.

The Graduate School of Geography suffered tremendous losses in the deaths of President Emeritus Wallace W. Atwood and Professor W. Elmer Ekblaw. Although Dr. Atwood had been retired for three years, his friendship and counsel were of great value to the School. Professor Ekblaw's place in the organization was so important that it seems next to impossible to replace him. With incredible effectiveness he was able to direct the work in the two fields of Human and Cultural Geography and Land Use, and during the many years that he was responsible for the journal, *Economic Geography,* he displayed outstanding editorial gifts. More important still was the esteem in which he was held by the students. A large number of them elected to write their dissertations under his direction. He will be greatly missed, but we consider ourselves highly fortunate in securing the services for this year of Professor Charles B. Fawcett of the University of London. He is no stranger to Clark, having been here on numerous occasions. Most recently he served as Visiting Professor during the second semester of 1946–47.

Geology

Because of heavy administrative duties, Dean Little has limited his teaching to the introductory course in Geology. This had a large enrollment and the work of the course is a particularly important part of our program in general education. The materials in the laboratory have been increased substantially during the past year so we now have excellent facilities for laboratory instruction as well as class work. In addition to the experience of working with the fine collection, the students take several short field trips and one extended field trip during the year.

German

This department participated actively in the Goethe Bicentennial. On March 11 Dr. Friedrich Bruns, Professor Emeritus at the University of Wisconsin, gave a public lecture on Goethe, and that same evening the students in the department, under the direction of Assistant Professor James S. Edwards, gave an excellent production of "Urfaust." Furthermore, Professor H. M. Bosshard attended the Goethe Bicentennial Celebration in Aspen, Colorado, this summer. Associate Professor Philip M. Palmer, who was on leave of absence during the past year, has resigned and Dr. Peter E. Welti, formerly of the University of Zurich, has been appointed instructor in the department. In addition to his courses in German Language and Literature, Professor Bosshard was chairman of the cooperative course on Literature and the Nature of Man.

History and International Relations

The most important change in the undergraduate program in this field has occurred in connection with the introductory course. Until the past year the subject of this course was an Introduction to European History. This past year the content was shifted to include a survey of the history of both Europe and the United States, with Professor Dwight E. Lee and Assistant Professor Robert F. Campbell collaborating. Associate Professor Sherman S. Hayden and Assistant Professor Campbell have also been active in two new interdepartmental programs. One of these is in International Relations and the other in American Civilization. Several recent graduates of the college who have majored in history and international relations are now pursuing graduate work at other institutions. The department has also carried a heavy responsibility in directing the work of graduate students, six of whom received the degree of Doctor of Philosophy at the close of the year. Articles by Professor H. Donaldson Jordan, Professor Lee, and Assistant Professor Campbell have been published during the past year, and Professor Lee was one of the editors of the volume, *Essays in History and International Relations,* in honor of Dr. George Hubbard Blakeslee. The departmental seminar had the following as visiting speakers during the year: Professor Robert G. Albion of Princeton University and Harvard University, Dr. Shichira Matsui of Doshisha University, Professor Nathaniel Peffer of Columbia University, and Professor George Waskovich of Hunter College.

Mathematics

With the retirement of Professor Carey E. Melville in 1948, the Department of Mathematics has undergone reorganization under the leadership of the new chairman, Professor Charles T. Bumer. A strong program is being developed to assist students who are majoring in the sciences and a proper sequence is available for the growing number of students who wish to make mathematics their major field. There is a definite continuity with the policy of the past concerning the understanding of the place of mathematics in the total program of studies. We continue to look upon mathematics not merely as a tool subject but as a distinct field of investigation, studying the interrelationships between things. Even when mathematics is looked upon as useful to the sciences, it is important not to confuse the mathematical model used in the solution of physical problems with the physical problems themselves. Two new appointments have been made in this department for the coming year. They are Assistant Professor John S. Stubbe, formerly of the University of New Hampshire, and Instructor Robert R. Christian, formerly of Yale University.

Philosophy

Although we do not have a Department of Philosophy, there is at the present time an adequate sequence of courses for liberal education. For some time the work in philosophy was limited to one course given by a member of the Psychology Department. I took responsibility for this course when I came to Clark in 1946 and for two years this was the only work given. In 1948 we had the part-time services of Mr. Robert N. Beck who taught two half courses in Logic and Introduction to Philosophy, while I introduced a course on the History of Philosophy. Mr. Beck has now come on the staff as a full-time instructor and this year is adding a half course in Ethics, a half course in Social Philosophy, and he is collaborating with me in giving an advanced course in Contemporary Philosophy.

Physics

Despite the limitation of staff and a large enrollment in the basic physics course, important projects over and above the teaching function have been carried on successfully. The outstanding accomplishment of the past year has been the near completion of the 21-foot spectrograph. Also, Associate Professor Roy C. Gunter, Jr., has completed writing a set of experiments for the electronics course emphasizing electron fundamentals rather than technique. The last two months of laboratory time of this course are devoted to special projects. He is now writing an optics manual and is continuing research at the Boston University Optical Research Laboratory on the stability of film under various drying conditions and on the electro-optical shutter. Other project work is under way on ionization measurements by means of the Lindemann electrometer, on the diffraction of electrons, and on the construction and operation of a high-voltage Geiger counter. Research on a photoelectric multiplier scintillation counter is now in progress.

Psychology and Education

Books by Professor Heinz Werner and Associate Professor John E. Bell were published in the Fall of 1948, and papers were published by Professor Vernon Jones, Associate Professors Thelma Alper and Seymour Wapner as well as by part-time members of the staff. Professor Jones was asked by the Palmer Foundation to conduct a workshop in the field of character education and this was done in connection with the second term of our summer school of 1949. A large number of teachers and school administrators participated in the workshop and there were several visiting lecturers. Our Clinical Training Program is now on a high level of performance, and we also have a good group of graduate students working in the fields of experimental and genetic psychology. The staff has been strengthened this year by the appointment of Assistant Professor Gordon T. Gwinn, formerly of Wesleyan University. Our greatest loss is the resignation of Dr. Eliot Rodnick who for some years has been chief psychologist at the Worcester State Hospital and Associate Professor (Affiliate) at Clark. He has played a large role in developing our Clinical Training Program and will be in charge of this work at Duke University. Associate Professor Alper has been asked to succeed him as chairman of our Clinical Training Committee. Visiting lecturers before the psychology seminar during the past year were Dr. James Gibson of Smith College, Dr. Ernest Hilgard of Stanford University, Dr. Leo Postman of Harvard University, Mr. Roy Schafer of Riggs Foundation, Stockbridge, Dr. David Schneider of Harvard University, and Dr. Moncrieff Smith of Harvard University.

Romance Languages

Owing to recent changes in the personnel of this department, the principal energies during the past year have been directed toward clarification of aims and methods, development of a smoothly working organization, and continued study and improvement of the major and honors curriculum. We feel that very satisfactory progress has been made along these lines. The chief change in course offerings has been the resumption of the course in French Civilization which had not been offered for some years. Associate Professor Theodore Nicol took responsibility for this course, open to those with only a slight knowledge of French, and we feel that it is an important part of our program of general education. Again we express our appreciation of the valuable cooperation offered by the Worcester Art Museum. This department, of course, has also collaborated effectively in the cooperative course, Literature and the Nature of Man.

Physical Education

The University suffered a great loss in the death of Mr. Ernest L. Whitman who had been Director of Physical Education since 1904. Mr. Rocheleau Z. Granger, Jr. (Clark A.B. '38, M.A. in Ed. '39) has been made Director as Mr. Whitman's successor. We are continuing with our policy of physical education and athletics which has been in effect for some time. There is particular emphasis on intramural competition and carry-over sports. Intercollegiate athletics are maintained at a sane level. In addition to the established teams of soccer, basketball, and baseball, encouragement is given to competition in other fields where there is sufficient student interest. With the improvement of the tennis courts, the tennis team during the past year has been very active, and we have also had some competition in golf, swimming, fencing, and crew.

The women, also, have participated in crew activities and they have a schedule of intercollegiate basketball competition. For the women a course in hygiene is given to all freshman students during the first semester of the academic year, and a sequential program of physical training has been developed for freshmen, sophomores, and juniors. For the second time an exhibition of the work in physical education in the Women's College was held on May 4. Mrs. Richard C. Swenson has resigned as Assistant Director of Physical Education for

Women and is succeeded by Mrs. Carolyn Lutz Bourdon, formerly of Colby Junior College.

Library

The Library was fortunate this past year in being able to secure the services of Mr. Alfred M. Githens to advise on the best use of our building which is now forty-six years old. As a result of his suggestions, a new and improved loan-desk has been installed on the main floor. And a rearrangement of the functions of several rooms has taken place, giving more room for work space for the staff and two seminar rooms. A room has been fitted up on the ground floor to receive a representative part of Mr. Clark's collection of books and pictures originally housed in the Art Room. This room also serves to house and play the Carnegie Record Collection. The space saved in what was the Art Room will be used for additional book stack. We have also begun the process of reclassification of a substantial part of the collection.

TRUSTEES

During the past year two new permanent members have been elected to the Board of Trustees. They are Mr. Harry C. Coley, President of Howard Bros. Manufacturing Company, and Mr. John Jeppson, Assistant Secretary of the Norton Company. The Alumni Association elected as its new representative on the Board of Trustees Mr. John C. O'Brien (A.B. '14, M.A. '15), chief of the Washington bureau of the *Philadelphia Inquirer*. Mr. O'Brien replaces Dr. Clarence P. Shedd of Yale University whose term expired.

COMMENCEMENTS

At the Commencement exercises on May 29, Clark University graduated the largest class in its history. Bachelor's degrees were conferred on 165 men and women, 25 received Master's degrees, and 6 the degree of Doctor of Philosophy. The Commencement Address was delivered by President Colgate Whitehead Darden, Jr., of the University of Virginia. Honorary degrees were conferred upon Mr. Samuel Nathaniel Behrman, Mr. Darden, Mr. Harry Frank Guggenheim, Professor Charles August Kraus, Reverend Edmund Randolph Laine (A.B. '11), and Mr. Francis Henry Taylor. Reverend Mr. Laine preached the sermon at the Baccalaureate Service on the morning of May 29.

At the graduation exercises following the summer term, held on the afternoon of August 26, 51 Bachelor's degrees were awarded, 13 received Master's degrees, and 15 the degree of Doctor of Philosophy. The address on this occasion was given by the President.

Howard B. Jefferson

October, 1949

CLARK UNIVERSITY BULLETIN

Summer School Program

OF

Clark University

July 5 to August 18
1950

WORCESTER 3, MASSACHUSETTS

CLARK UNIVERSITY BULLETIN

No. 194 January, 1950

A SUMMER SCHOOL WITH AN INTEGRATED PROGRAM, including

A CORE THEME

American Citizenship.

A CORE COURSE

Social Factors in American Citizenship.

SUPPLEMENTING WORKSHOPS

In Economics, Education, English, Geography, and History.

INDEPENDENT RELATED COURSES

The BULLETIN is published January, March, May, September and October.

Entered as second-class matter December 29, 1920 at the Post Office at Worcester, Mass., under the Act of August 24, 1912. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized January 24, 1921.

ADMINISTRATIVE OFFICERS OF THE UNIVERSITY

HOWARD B. JEFFERSON, President

HOMER P. LITTLE, Dean of the College, and
Director of the Summer School

SUMMER SCHOOL STAFF

Education

VERNON JONES, PH.D., Professor of Educational Psychology, Chairman of the Department of Education.

DAVID LANE, M.A., Assistant Professor of Education, Associate Director of Veterans Administration.

CHARLES L. PELTIER, M.ED., Head of Department of Social Studies, Newton High School; Formerly Instructor in Education, Boston University.

Geography

SAMUEL VAN VALKENBURG, PH.D., Professor of Geography, Director of the Graduate School of Geography.

RAYMOND E. MURPHY, PH.D., Professor of Geography, Editor of Economic Geography.

HENRY J. WARMAN, PH.D., Associate Professor of Geography, Secretary of the Graduate School of Geography.

GUY H. BURNHAM, M.A., Cartographer.

Economics

SAMUEL J. BRANDENBURG, PH.D., Professor of Economics and Sociology.

History

ROBERT F. CAMPBELL, PH.D., Assistant Professor of American History.

English

KARL O. E. ANDERSON, PH.D., Associate Professor of English, Chairman of the Department of Composition and Literature.

The Plan

In the summer of 1950 Clark University is offering a specialized summer school. The program is designed primarily to meet the needs of secondary school teachers and administrators. It is built around the core theme of American Citizenship. The courses and workshops in Economics, Education, English, Geography, and History have been arranged to bring the subject matter emphases in these fields to bear upon the broad theme. The courses and workshop in Education have been specially arranged to consider the contributions of all subjects and all school activities to the broad citizenship objective.

The plan of offerings consists of:

(1) A core course entitled "Social Factors in American Citizenship" which is contributed to by leading professors in cooperating departments.

(2) A supplementary workshop in each of these departments.

(3) Eleven independent courses related to the core theme.

The core course and a workshop, although recommended for most teachers-in-service, are not required and individual courses may be freely elected. Student programs will be arranged on an individual basis and wide latitude in the selection of courses will be permitted.

It is assumed that graduate students in the subject-matter fields and college juniors and seniors will find their needs best met in the independent courses.

CLARK UNIVERSITY SUMMER SCHOOL

The Core Theme:

AMERICAN CITIZENSHIP

THE CORE COURSE: SOCIAL FACTORS IN AMERICAN CITIZENSHIP

The Supplementing Workshops

Education	Economics	History	English	Geography
Character and Citizenship Development	Current U. S. Economic Problems	Problems in American Social History	Some Great American Biographies	Geography in Education

Courses Related to the Core Theme

Education	Economics	History	English	Geography
Teaching the Social Studies The Secondary School Program Guidance in Secondary Schools	Economic History of the U. S.	U. S. History in the 20th Century	Survey of American Literature	Political Geography of the U. S. Economic Geography of the U. S. Urban Geography (American Cities) Climatology Cartography

INTEGRATION OF EDUCATION AND SUBJECT-MATTER FIELDS

The summer school program is designed to emphasize an integrated approach to American Citizenship through coordinated study in Education and subject-matter fields. The purpose is to meet the needs of teachers in their actual class-room situations. This will be achieved by inter-departmental cooperative study of everyday teaching problems brought into the core course, by conference and trips, and by detailed course and curriculum planning in the workshops.

SMALL, INTIMATE GROUPS IN WORKSHOPS AND CLASSES

It is the intention of the administration and faculty of The Summer School to keep the number of students in each workshop and class sufficiently small to permit a broad interchange of ideas, a friendly and intimate relationship among the students, and frequent opportunity for student-faculty contact and consultation.

DISCUSSION, CONFERENCES, OBSERVATIONS, READINGS

In the core course and the workshops the problem method of instruction will be employed, and teachers will be invited to submit practical problems for group study. The presence of subject-matter specialists in the core course and in the workshops should not only add to the richness of the discussions but should serve to make readily available to teachers, through discussion and conference, facts and reading references which would otherwise require more arduous study than the practicing teacher normally has time for on the job.

It is the intention of the Summer School to emphasize critical thinking, discussion, and practical planning on the part of teachers. It is believed that with ready access at all times to specialists—both in subject-matter and Education—cooperating as a source team, the teacher will have the time and energy to engage with fellow teachers in conferences and informal discussions, and to translate his learning and experience into plans of action for improved instruction in his school.

THE LOCATION OF THE SUMMER SCHOOL IN RELATION TO OPPORTUNITIES FOR OFF-CAMPUS STUDY AND EXPERIENCE

Clark University is situated at almost the exact center of Massachusetts. Opportunities will be provided in the core course and workshops for week-end visits to the following places which are within a radius of 75 miles of the University: Plymouth, Concord, Lexington, Boston, Boston Harbor and the seashore, the White Mountains, reconstructed Sturbridge Village, Springfield, the Connecticut Valley, and other points of geographic, historic, and literary significance. Many of these points of interest are shown pictorially on the drawing on page nine. Those not wishing to participate in trips associated with courses may readily undertake profitable week-end outings of their own planning.

Worcester and its immediate environs provide excellent demonstration and field-work facilities in the areas of economic, recreational, cultural, religious, and civic life.

Courses

THE CORE COURSE

SS. 299 *Social Factors in American Citizenship.* The purpose of this course is to assist those interested in problems of education above the elementary school level to gain as many facts and procedures as possible which they can apply in their direction of the broad citizenship development of youth. The course will deal both with facts and methods of sharing facts and attitudes with young people. Leading professors of the University in the fields of history, economics, geography, and American literature will pool their knowledge in attempts to help teachers with the requisite factual bases. Their discussions will be geared to the needs of teachers in directing youth toward a better understanding and appreciation of the development and present problems of democratic citizenship. Assisting in the study of methods, activities, and curriculum will be the co-directors of the course representing the field of education and bringing to the course a background of secondary school teaching.

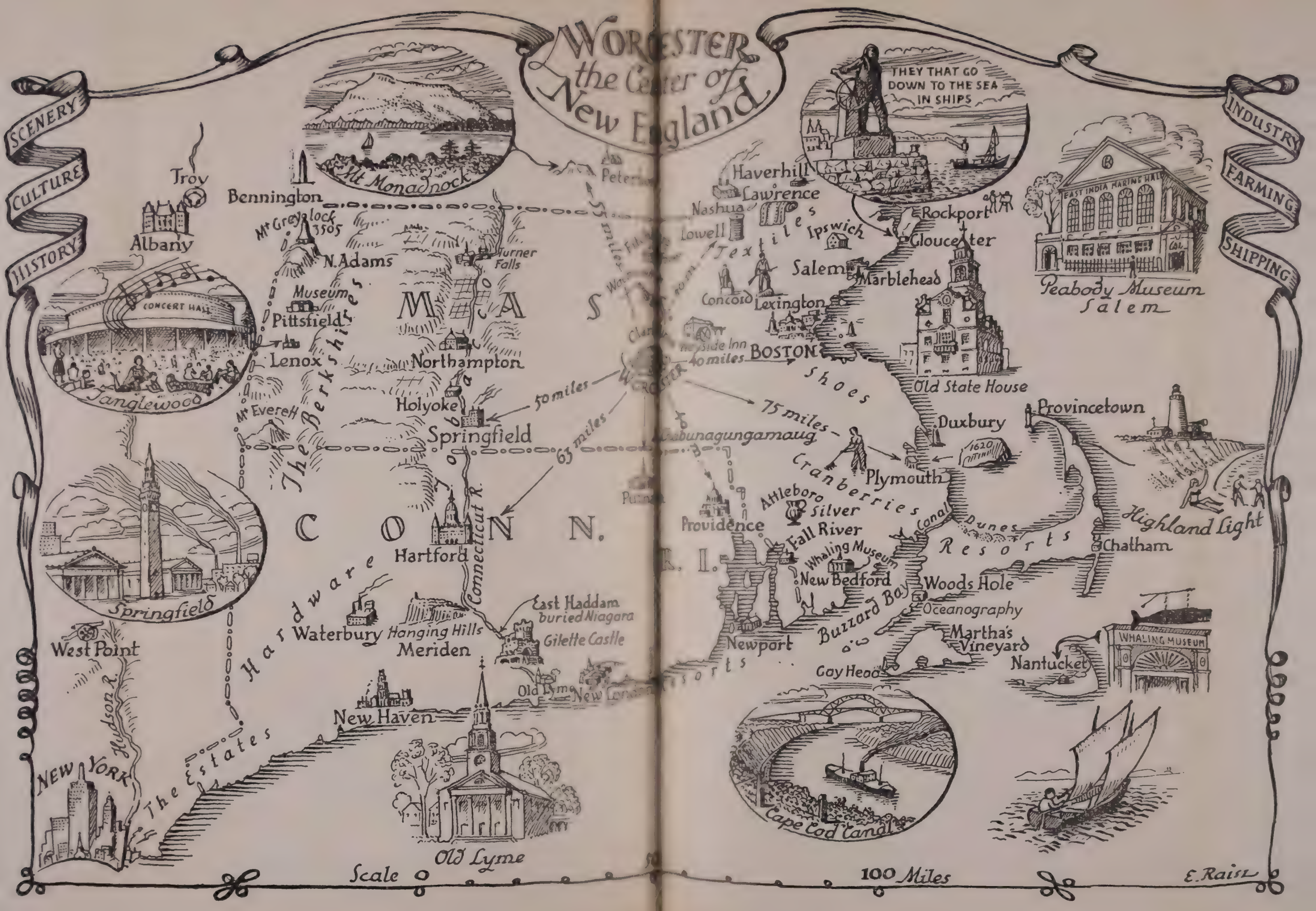
The course will be conducted informally on a problem-solving basis with discussions, readings, lectures, demonstrations, and trips.

The student who elects this core course will normally take one of the supplementing workshops also, where he will work more intensively in the area in which he is most interested. Those preferring an independent course, however, in addition to the core course, may elect such a course instead of a workshop.

Three semester hours of credit in Education, or in a subject-matter field if taken in conjunction with a suitable workshop. Students desiring to use credit gained in the core course toward a graduate degree should consult the head of the department concerned.

Daily except Saturday, at 9:00 A.M.

Messrs. Jones and Warman
with the cooperation of the other
members of the Summer School Staff.


WORCESTER the Center of New England
SCENERY
CULTURE
HISTORY
INDUSTRY
FARMING
SHIPPING
Mt Monadnock
THEY THAT GO DOWN TO THE SEA IN SHIPS
EAST INDIA MARINE HALL
Peabody Museum Salem
Troy
Albany
Bennington
Mt Greylock 3505
N. Adams
Museum
Pittsfield
CONCERT HALL
Tanglewood
Lenox
Mt Everett
The Berkshires
M A S S
Turner Falls
Northampton
Holyoke
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50 miles
63 miles
55 miles
40 miles
75 miles
Peterboro
Fitchburg
Clinton
Wayside Inn
WORCESTER
Haverhill
Lawrence
Nashua
Lowell
Textiles
Ipswich
Rockport
Gloucester
Salem
Marblehead
Concord
Lexington
BOSTON
Shoes
Old State House
Duxbury
Provincetown
1620
Plymouth
Cranberries
Chaubunagungamaug
Putnam
Providence
Attleboro Silver
Fall River
Whaling Museum
New Bedford
Canal
Dunes
Resorts
Chatham
Highland Light
Woods Hole
Oceanography
Buzzard Bay
Martha's Vineyard
Nantucket
WHALING MUSEUM
Gay Head
Newport
R. I.
Resorts
Cape Cod Canal
Springfield
C O N N.
Hartford
Hardware
Waterbury
Hanging Hills
Meriden
East Haddam buried Niagara
Gilette Castle
Old Lyme
New London
New Haven
Old Lyme
West Point
Hudson R.
NEW YORK
The Estates
Scale 0 100 Miles
E. Raisz

ECONOMICS

SS. 240 *Workshop—Current Economic Problems of the United States.* An attempt will be made to analyze and discuss current economic issues which are important for intelligent citizenship. Among these issues will be the following: Federal and state aid to education; the federal budget; inflation and deflation; international economic reconstruction. Problems introduced by members of the class will also be discussed.
Daily, except Saturday, at 2:00 P.M. MR. BRANDENBURG

SS. 24 *Economic History of the United States.* After a brief survey of colonial development, attention will be given to the agricultural and industrial growth of the nation, money and credit, transportation, commerce, the tariff, the government and economic life.
Daily, except Saturday, at 10:10 A.M. MR. BRANDENBURG

EDUCATION

SS. 215b *Workshop in Character and Citizenship Development.* A study of the main problems and principles basic to education in character and citizenship in secondary school. Provision will be made for students to work both individually and in committees on problems relating to their own teaching situations. The workshop will be integrated with the core course, Social Factors in American Citizenship, but may with the approval of the instructor be elected separately in special cases.
Daily, except Saturday, at 2:00 P.M. MR. JONES

SS. 206b *Teaching the Social Studies: Methods and Curriculum.* A study of recent trends in methods, curriculum, and materials in the social studies. Among other topics to be considered are: the social studies teacher in the community; controversial issues, the changing emphases in current social studies programs; the problems of correlation, fusion, and integration; visual and auditory experiencing; the role of current events, demonstrations, and trips. Actual problems from members of the class and from the instructor's current secondary school experience will form the basis of much of the study and discussion.
Daily, except Saturday, at 10:10 A.M. MR. PELTIER

SS. 231 *The Secondary School Program: Integrating the Curricular and Extra-Curricular Activities.* The purpose of this course is to study the secondary school program and its problems in light of changing student needs and over-all educational objectives. Members of the class will be invited to submit problems which they are actually facing in their schools, and individual and cooperative study will be directed toward the solution of these problems. A certain amount of systematic study will also be directed to principles and practices which recent developments have emphasized, and which the instructor has found significant and practical in his own work in the high school field.

Daily, except Saturday, at 11:20 A.M. MR. PELTIER

SS. 212 *Guidance in Secondary Schools.* A survey of principles and methods of guidance, with emphasis on counseling techniques and on problems of vocational, educational, and social adjustment. The course is designed to help teachers become more effective participants in the guidance program as well as to provide an introduction to the field for those who plan to specialize in guidance work.

Daily, except Saturday, at 7:50 A.M. MR. LANE

ENGLISH

SS. 115 *Workshop—Significant Biographical Works in American Literature.* A detailed study of 8 or 9 important biographical works, plus supplementary reading of particular interest to members of the workshop. The purpose of this course is to study significant issues in American life and the attitude of some of our great thinkers and writers towards these problems; in this way the evolution of the American mind will be analyzed. Individuals and committees will have an opportunity to work on curricular and other practical problems in their own schools. Trips to Concord, Cambridge, and other nearby points of literary interest will be arranged.

Daily, except Saturday, at 2:00 P.M. MR. ANDERSON

SS. 111 *A Survey of American Literature.* A history of American literature from Puritan times to the beginning of first World War with the main emphasis on the nineteenth century. This course traces the evolution of American literature from its weak imitative beginnings to works that are not only truly American in subject-matter and spirit but are also of first class literary value.

Daily, except Saturday, at 10:10 A.M. MR. ANDERSON

GEOGRAPHY

SS. 20b *Workshop—Geography in Education.* This course, devoted to the study of geography in the present-day American school system, is conducted as a workshop, the materials for which grow out of the core course, and are keyed to meet the needs of teachers at various instructional levels.

Daily, except Saturday, at 2:00 P.M. MR. WARMAN

SS. 32b *Climatology II.* This course is the continuation of the Climatology course given during the summer school of 1949, discussing the climates of the continents. Students who did not take it last year may enter only by special permission of the professor.

Daily, except Saturday, at 2:00 P.M.

MR. VAN VALKENBURG

SS. 202 *American Problems in Political Geography.* In this course world problems in Political Geography are discussed from the American point of view and only those are selected in which the United States is actively engaged as belonging to her sphere of world interest. The impact of these problems on American public opinion will be stressed.

Daily, except Saturday, at 11:20 A.M.

MR. VAN VALKENBURG

SS. 262 *Economic Geography of the United States.* A study of the distribution of people and of their economic activities and problems organized on a regional basis. For each region problems will be considered that are related to the geography of the region. The utilization of resources by the American citizen will be treated through textual materials, maps, charts, diagrams and visitations. Discussion of problems introduced by members of the class will be a feature of the course.

Daily, except Saturday, at 10:10 A.M. MR. MURPHY

SS. 261 *Urban Geography.* An investigation of the structure of the American city with emphasis upon methods of study of cities and of trends in city development. An interpretation of maps with a view to discovery of trends revealed through the map patterns. This geographic approach will include such problems as the core area, expansion of urban communities, the "neighborhood," marketing areas, educational and recreational land use.

Daily, except Saturday, at 7:50 A.M. MR. MURPHY

SS. 191 *Cartography.* A discussion of various graphic methods and their application to geographic data. Since emphasis will be placed upon the mastery of cartographic tools and instruments, this course should prove particularly helpful to those planning to enter government service or to do illustrative work.

Daily, except Saturday, at 1:30 P.M. MR. BURNHAM

HISTORY

SS. 23 *Workshop—Problems in American Social History.* Readings and discussion concerned with a number of controversial problems in American Civilization, including the interpretation of the Constitution, Turner's Frontier Thesis, The Age of Jackson, Slavery and the Civil War, The Age of Enterprise, and the New Deal.

Daily, except Saturday, at 2:00 P.M. MR. CAMPBELL

SS. 235 *The United States in the 20th Century.* A study of the chief influences in American Civilization since 1900, with special attention to the emergence of current social and economic problems.

Daily, except Saturday, at 11:20 A.M. MR. CAMPBELL

CREDITS, COSTS, AND LIVING ACCOMMODATIONS

Each subject carried yields credit of one-half course (three semester hours). Two subjects constitute a normal program, including the core course and workshops.

The tuition for the normal program is $80.00; for less than a full program, the charge is $40.00 per subject. A student carrying a full program may audit a third course without additional cost; otherwise the cost of an audited course is the same as for one carried for credit. The core course may not be audited. In addition to tuition, there is a matriculation fee of $5.00 for students entering for the first time to be paid at the time of registration. Tuition is payable at the Bursar's office not later than 5 P.M., Friday of the first full week of the term.

Dormitory facilities, especially for women, are somewhat limited. Reservations should be made promptly. A deposit of $10.00 is required to reserve a room. This deposit, less a charge of $1.00 for light, is returnable if the room is left in good order. Rooms for women range in price from $3.50 to $5.00 per week, depending upon the location of the room; rooms for men cost $4.00 to $5.00 per week. Room rent is payable in advance.

COURSES

All courses meet daily, Monday through Friday. Courses whose numbers begin with 2 are open to juniors, seniors, graduate students, and teachers; courses whose numbers begin with 3 are normally for graduate students only. Courses beginning with 1 are open to all, but normally do not carry graduate credit.

GRADUATE COURSES

Graduate students formally registered in the summer term may, with the approval of their major department, enroll in thesis courses under the direction of regular members of the staff other than those listed in the present bulletin.

Courses beginning with 2 or 3 are acceptable for credit toward a graduate degree when approved in advance by the student's major department.

VETERANS

Veterans attending the 1950 Summer School must either present their supplemental Certificates of Eligibility to the General Office not later than Friday afternoon of the first full week of the term or pay their tuition. All tuition paid will be refunded shortly after the Certificate of Eligibility is at hand at the General Office.

The above does not apply to veterans who have not attended another school since leaving Clark.

the Director of the Clark University Summer School:

wish to enroll as a student in the Summer School for 1950.

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upation.................................Academic Degrees.............................
(If college student state class)

you a candidate for an Academic Degree?...

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you wish dormitory space?..........................If so, please enclose deposit.

tative list of courses you expect to enter:...

FOR FURTHER INFORMATION ADDRESS
Dean Homer P. Little, Director of the Summer School

For special information on the core course and workshops write to
Dr. Vernon Jones or Dr. Henry J. Warman

Clark University Bulletin

NUMBER 195 CATALOG MARCH, 1950

WORCESTER, MASSACHUSETTS

Press, 3-6-50

Clark University Bulletin

CATALOG NUMBER

The Catalogue is a record for the current academic year 1949-1950. Such announcements for the year 1950-1951 as can be made at the time of publication are included.

The Bulletin is published in January, March,
October, November and December

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Calendar

The academic year begins on the Monday before the fourth Thursday in September and ends on Saturday before the thirty-eighth Monday. It includes two approximately equal semesters and two vacation periods:—two weeks including Christmas Day and New Year's, and a week near the first of April.

The first semester ends on the Saturday before the twentieth Monday and the second semester begins on the twentieth Monday of the academic year.

1949-50

1949			
Sept.	19	Monday	Beginning of academic year.
Oct.	12	Wednesday	Columbus Day. A holiday.
Nov.	1	Tuesday	Last day for receiving applications for admission to candidacy for the Degree of Doctor of Philosophy in May 1950.
Nov.	11	Friday	Armistice Day. Not a holiday.
Nov.	12	Saturday	Mid-semester reports.
Nov.	23	Wednesday	Beginning of Thanksgiving recess at 5 P.M.
Nov.	28	Monday	End of Thanksgiving recess at 8 A.M.
Dec.	17	Saturday	Beginning of Christmas recess at 1 P.M.
1950			
Jan.	3	Tuesday	End of Christmas recess at 8 A.M.
Jan.	10	Tuesday	Registration for second semester. Classes omitted.
Jan.	16	Monday	Beginning of semester examination period.
Jan.	28	Saturday	End of first semester.
Jan.	30	Monday	Beginning of second semester.
Feb.	4	Saturday	Last day for receiving applications for admission to candidacy for the Degrees of Master of Arts and Master of Arts in Education in June 1950.
Feb.	22	Wednesday	Washington's Birthday. A holiday.
Mar.	18	Saturday	Mid-semester reports.
Apr.	1	Saturday	Beginning of spring recess at 1 P.M.
Apr.	10	Monday	End of spring recess at 8 A.M.
Apr.	19	Wednesday	Patriot's Day. Not a holiday.
May	8	Monday	Ph.D. dissertations due at Recorder's Office at 9 A.M.
May	15	Monday	M.A. theses due at Recorder's Office at 9 A.M.
May	18	Thursday	Beginning of semester examination period.
May	30	Tuesday	Memorial Day. A holiday.
June	3	Saturday	End of academic year.
June	4	Sunday	Commencement Day.

1950 Summer School

July	5	Wednesday	Beginning of Summer School. Registration day.
July	14	Friday	Last day for payment of Summer School tuition.
Aug.	18	Friday	End of Summer School.

1950-51

Sept.	25	Monday	Beginning of academic year 1950-51.
Oct.	5	Thursday	Last day for payment of term bills.
Oct.	12	Thursday	Columbus Day. A holiday.
Nov.	1	Wednesday	Last day for receiving applications for admission to candidacy for the Degree of Doctor of Philosophy in June 1951.

Nov.	11	Saturday	Armistice Day. Not a holiday.
Nov.	18	Saturday	Mid-semester reports.
Nov.	22	Wednesday	Beginning of Thanksgiving recess at 5 P.M.
Nov.	27	Monday	End of Thanksgiving recess at 8 A.M.
Dec.	16	Saturday	Beginning of Christmas recess at 1 P.M.
1951			
Jan.	2	Tuesday	End of Christmas recess at 8 A.M.
Jan.	16	Tuesday	Registration for second semester. Classes omitted.
Jan.	22	Monday	Beginning of semester examination period.
Feb.	3	Saturday	End of first semester.
Feb.	5	Monday	Beginning of second semester.
Feb.	10	Saturday	Last day for receiving applications for admission to candidacy for the Degrees of Master of Arts and Master of Arts in Education in June 1951.
Feb.	15	Thursday	Last day for payment of term bills.
Feb.	22	Thursday	Washington's Birthday. A holiday.
Mar.	24	Saturday	Mid-semester reports.
Mar.	31	Saturday	Beginning of spring recess at 1 P.M.
Apr.	9	Monday	End of spring recess at 8 A.M.
Apr.	19	Thursday	Patriot's Day. Not a holiday.
May	14	Monday	Ph.D. dissertations due at Recorder's Office at 9 A.M.
May	21	Monday	M.A. theses due at Recorder's Office at 9 A.M.
May	24	Thursday	Beginning of semester examination period.
May	30	Wednesday	Memorial Day. A holiday.
June	9	Saturday	End of academic year.
June	10	Sunday	Commencement Day.
Sept.	24	Monday	Beginning of academic year 1951-52.

BOARD OF TRUSTEES

Final authority in all matters pertaining to the University is lodged in the Board of Trustees by charter granted by the General Court of the Commonwealth of Massachusetts.

George H. Mirick (1920), President	Worcester, Mass.
Francis H. Dewey, Jr. (1934)	Worcester, Mass.
Robert H. Loomis (1936)	Boston, Mass.
Frank L. Adams (1938)	Worcester, Mass.
Howard M. Booth (1939)	Worcester, Mass.
Samuel H. Dolbear (1940)	New York, N. Y.
Carl E. Wahlstrom (1942), Vice-President	Worcester, Mass.
Raymond T. Gifford (1947), Treasurer	Worcester, Mass.
John Jeppson (1948)	Worcester, Mass.
Harry C. Coley (1948)	Worcester, Mass.

ELECTED TO REPRESENT THE ALUMNI

Archibald M. Hillman (1946) for four years	Worcester, Mass.
Roland A. Erickson (1947) for four years	Worcester, Mass.
Hiram N. Rasely (1948) for four years	Belmont, Mass.
John C. O'Brien (1949) for four years	Chevy Chase, Md.

ADMINISTRATION

President of the University	Howard B. Jefferson
Dean of the College	Homer P. Little
Treasurer	Raymond T. Gifford 18 Chestnut St., Worcester, Mass.
Librarian	Albert C. Gerould
Associate Dean for Men	Victor B. Johnson
Associate Dean for Women	M. Hazel Hughes
Recorder	Lydia P. Colby
Assistant Treasurer	Allan B. Miller
Bursar	Mary A. Hubbard
Director of Public Relations	Donald P. Cole
Secretary of the Alumni	George E. Allen
Medical Director for Men	Michael B. Fox, M.D.
Medical Director for Women	Constance Kaliris, M.D.

Faculty

(Listed in order of academic seniority within each rank)

HOWARD BONAR JEFFERSON, PH.D., LL.D. 160 Woodland St.
President and Professor of Philosophy since 1946.
A.B., Denison University, 1923; Ph.D., Yale University, 1929; LL.D., Denison University, 1948.

HOMER PAYSON LITTLE, PH.D. 156 Woodland St.
Dean of the College and Professor of Geology since 1922.
A.B., Williams College, 1906; Ph.D., Johns Hopkins University, 1910.

BENJAMIN SHORES MERIGOLD, PH.D., SC.D. 17 Charlotte St.
Professor of Chemistry, Emeritus.

GEORGE HUBBARD BLAKESLEE, PH.D., L.H.D. Washington, D. C.
Professor of History and International Relations, Emeritus.

PHILIP HUDSON CHURCHMAN, PH.D. 20 Institute Rd.
Professor of Romance Languages, Emeritus.

HAVEN DARLING BRACKETT, PH.D. Dodge, Mass.
Professor of Greek and Latin, Emeritus.

LEROY ALLSTON AMES, A.M. Spencer, Mass.
Professor of English Literature, Emeritus.

WILLIAM HOMER WARREN, PH.D. Fayston, Vt.
Professor of Organic Chemistry, Emeritus.

DOUGLAS CLAY RIDGLEY, PH.D. Bloomington, Ill.
Professor of Geography in Education, Emeritus.

CAREY EYSTER MELVILLE 33 Vincent Ave.
Professor of Mathematics, Emeritus.

LORING HOLMES DODD, PH.D. 88 Sagamore Rd.
Professor of Rhetoric, Emeritus.

SAMUEL J. BRANDENBURG, PH.D. 173 Woodland St.
Professor of Economics and Sociology since 1923.
A.B., Miami University, 1904; Ph.M., University of Chicago, 1909; Ph.D., University of Wisconsin, 1922.

JESSE LUNT BULLOCK, PH.D. 35 Downing St.
Professor of Chemistry and Director of the Chemical Laboratories.
A.B., Harvard University, 1914; A.M., 1928; Ph.D., 1932. Assistant Professor, 1926-32; Associate Professor, 1932-37; Professor since 1937 (February).

JAMES ACKLEY MAXWELL, PH.D. 15 Sunnyhill Dr.
Professor of Economics.
A.B., Dalhousie University, 1921; A.M., Harvard University, 1923; Ph.D., 1927. Instructor, 1924-26; Assistant Professor, 1926-28; Associate Professor, 1928-37; Professor since 1937 (February).

SAMUEL VAN VALKENBURG, PH.D. 11 South Flagg St.
Professor of Geography. Director of the Graduate School of Geography.
Ph.D., University of Zürich, 1918. Special Lecturer in Geography, second semester, 1926-27; Assistant Professor, 1927-29; Associate Professor, 1932-37; Professor since 1937 (February).

ROBERT STANLEY ILLINGWORTH, A.M., ED.M. 209 Lovell St.
Professor of Speech and Drama.
A.B., Clark University, 1917; A.M., Lafayette College, 1926; Ed.M., Harvard University, 1933; B.D., Andover Theological School, 1945. Associate Professor of English, 1931-38; Professor since 1938 (February). Director of the Summer School, 1935-41.

VERNON JONES, PH.D. 267 Salisbury St.
Professor of Educational Psychology.
A.B., and A.M., University of Virginia, 1920; A.M., Columbia University, 1924; Ph.D., 1926. Associate Professor, 1926-38; Professor since 1938 (February).

HENRY DONALDSON JORDAN, PH.D. 171 Woodland St.
Professor of English History.
A.B., Harvard University, 1918; A.M., 1922; Ph.D., 1925. Associate Professor, 1931-38; Professor since 1938 (February).

DWIGHT ERWIN LEE, PH.D. 3 Woodman Rd.
Professor of Modern European History.
A.B., University of Rochester, 1921; A.M., 1922; Ph.D., Harvard University, 1928 (February). Assistant Professor, 1927-30; Associate Professor, 1930-38; Professor since 1938 (February).

ARTHUR FLETCHER LUCAS, PH.D. 54 Morningside Rd.
Professor of Economics. Director of the Division of Business Administration.
A.B., Bates College, 1920; A.M., Princeton University, 1923; Ph.D., 1925. Assistant Professor, 1926-29; Associate Professor, 1929-38; Professor since 1938 (February).

DAVID POTTER, PH.D. 113 South St., Auburn, Mass.
Professor of Biology.
B.Sc., Massachusetts Agricultural College, 1916; M.Sc., 1923; Ph.D., Harvard University, 1932. Instructor, 1924-27; Assistant Professor, 1927-33; Associate Professor, 1933-38; Professor since 1938 (February).

PERCY MARTIN ROOPE, PH.D. 2 Lovell Drive
Professor of Physics.
A.B., Clark University, 1920; A.M., 1924; Ph.D., 1927. Instructor, 1921-27; Assistant Professor, 1927-31; Associate Professor, 1931-43; Professor since 1943.

*HENRY MORANT BOSSHARD, PH.D. 10 Shaffner St.
Professor of German.
Ph.D., University of Zürich, 1919; M.Ed., Harvard University, 1921. Assistant Professor, 1927-32; Associate Professor, 1932-43; Professor since 1943.

RAYMOND EDWARD MURPHY, PH.D.
153 Boylston St., Shrewsbury, Mass.
Professor of Economic Geography since 1946.
B.S., Missouri School of Mines and Metallurgy, 1923; M.S., University of Wisconsin, 1926; Ph.D., 1930.

HEINZ WERNER, PH.D. 10 Atwater St.
Professor of Psychology since 1947.
G. Stanley Hall Professor of Genetic Psychology, April, 1949.
Ph.D., University of Vienna, 1915.

JOSEPH WEINREB, M.D. 21 Catherine St.
Professor (Affiliate) of Psychology since 1947.
B.A., Vanderbilt University, 1931; M.D., 1935.

CHARLES THEODORE BUMER, PH.D. 121 Richmond Ave.
Professor of Mathematics since 1948.
B.Sc., Denison University, 1919; M.A., Harvard University, 1922; Ph.D., Ohio State University, 1931.

CHARLES BUNGAY FAWCETT, D.Sc. 17 Claremont St.
Visiting Professor of Human Geography, 1949-50.
B.Sc., Nottingham College, 1908; B.Litt., Oxford University, 1913; M.Sc., Nottingham College, 1916; D.Sc., University of London, 1925.

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*Died November 22, 1949.

Olof Georg Jonasson, Ph.D. Main Street
Atwood Visiting Professor of Geography, Second Semester, 1949-1950.
Phil. Lic., University of Stockholm, 1923; Ph.D., Clark, 1926.

Rudolf Fink Nunnemacher, Ph.D.
1 Manchaug Rd., Sutton, Mass.
Associate Professor of Biology.
B.S., Kenyon College, 1934; M.A., Harvard University, 1935; Ph.D., 1938. Assistant Professor, 1939-44; Associate Professor since 1944.

John Elderkin Bell, Ed.D. 117 Forest St.
Associate Professor of Psychology since 1944.
B.A., University of British Columbia, 1933; M.A., Columbia University, 1941; Ed.D., 1942.

Paul Francis Marble, A.M. Wachusett St., Princeton, Mass.
Associate Professor of English.
Ph.B., Brown University, 1930; A.M., 1933. Instructor in English 1939-44; Assistant Professor 1944-46; Associate Professor since 1946 (January).

*Arthur Earl Martell, Ph.D. 17 Hapgood Way, Shrewsbury
Associate Professor of Chemistry.
B.S., Worcester Polytechnic Institute, 1938; Ph.D., New York University, 1941. Assistant Professor, 1942-46; Associate Professor since 1946 (January).

Donald MacGillavry, Jr., Ph.D. 1133 Pleasant St.
Associate Professor of Chemistry since 1946.
Cand., University of Amsterdam, 1923; Docts., University of Amsterdam, 1928; Ph.D., Columbia University, 1933.

Herbert P. Barnett 19B Elm St.
Associate Professor (Affiliate) of Fine Arts since 1946.
Head of Department of Drawing, Painting and Sculpture, School of the Worcester Art Museum.

Richard Jewett Lougee, Ph.D.
Brigham Hill Rd., N. Grafton, Mass.
Associate Professor of Physiography since 1947 (January).
B.S., Dartmouth College, 1927; A.M., University of Michigan, 1929; Ph.D., Columbia University, 1938.

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*Absent on leave, 1949-50.

ALBERT CHAMBERLAIN GEROULD Rochdale, Mass.
Librarian.
A.B., Dartmouth College, 1932; B.S. in Libr. Sci., Columbia University, 1935.

*FREDERICK W. KILLIAN, A.B. 15 Worcester Ave., Grafton, Mass.
Associate Professor of Sociology since 1947.
A.B., New York University, 1934; LL.B., 1925.

GEORGE EDWARD HARGEST, M.B.A. 150 Woodland St.
Associate Professor of Economics and Business Administration.
B.S., Temple University, 1933; M.Ed., 1937; M.B.A., Boston University, 1947. Assistant Professor, 1942-48; Associate Professor since 1948.

THEODORE NICOL, PH.D. 10 Circuit Ave.
Associate Professor of Romance Languages.
A.B., Clark University, 1926; A.M., Harvard University, 1928; Ph.D., 1933. Visiting Professor, 1946-48; Associate Professor since 1948.

J. RICHARD REID, PH.D. Stafford St., Rochdale, Mass.
Associate Professor of Romance Languages.
A.B., Swarthmore College, 1935; A.M., Harvard University, 1936; Ph.D., 1943. Assistant Professor, 1944-48; Associate Professor since 1948.

SEYMOUR WAPNER, PH.D. 20 Prouty Lane
Associate Professor of Psychology since 1948.
A.B., New York University, 1939; A.M., University of Michigan, 1940; Ph.D., 1943.

HENRY JOHN WARMAN, PH.D. 193 Lovell St.
Associate Professor of Geography.
B.S. in Ed., Bloomsburg, Pa., State Teachers' College, 1932; Ed.M., Temple University, 1938; Ph.D., Clark University, 1945. Assistant Professor, 1943-44, 1945-48; Associate Professor since 1948.

ROY CHALMERS GUNTER, PH.D. Dodge, Mass.
Associate Professor of Physics.
B.S., Bowdoin College, 1938; A.M., Boston University, 1939; Ph.D., 1942. Instructor in Physics and Mathematics 1941 (February)-1943; Assistant Professor of Physics 1943-49; Associate Professor since 1949.

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*Absent on leave, first semester, 1949-50.

Karl Oscar Emanuel Anderson, Ph.D. 44 Richmond Ave.
Associate Professor of English.
A.B., Harvard University, 1927; A.M., 1928; Ph.D., 1942. Assistant Professor, 1945-49; Associate Professor since 1949.

Sherman Strong Hayden, Ph.D. 68 Moore Ave.
Associate Professor of International Relations.
A.B., Harvard University, 1930; LL.B., 1933; M.A., Columbia University, 1936; Ph.D., 1942. Assistant Professor, 1946-49; Associate Professor since 1949.

Thelma G. Alper, Ph.D. Wellesley, Mass.
Associate Professor of Psychology since 1948.
A.B., Wellesley College, 1929; M.A., 1933; Ph.D., Harvard University, 1943.

Edith Meyer, Ph.D. Jamaica Plain, Mass.
Associate Professor (Affiliate) in Psychology, 1947-48.
Ph.D., University of Leipzig, 1933; Diplômes des Etudes Pédagogiques, University of Geneva, 1935.

Frederick Wyatt, Ph.D. Cambridge, Mass.
Associate Professor (Affiliate) in Psychology, 1947-48.
Ph.D., University of Vienna, 1936.

M. Hazel Hughes, M.Ed. 638 Pleasant St.
Director of Physical Education for Women.
B.Ed., Clark University, 1944; M.Ed., Boston University, 1949.

Robert Francis Campbell, Ph.D. Oakham, Mass.
Assistant Professor of American History since 1946.
A.B., Yale University, 1939; A.M., Columbia University, 1940; Ph.D., 1947.

Thomas Quinlevan Gilson, A.M.
82 Pleasant St., Leicester, Mass.
Assistant Professor of Psychology since 1946.
A.B., Princeton University, 1938; A.M., Columbia University, 1942.

J. Fannin King, A.M. Estabrook Hall
Assistant Professor of Romance Languages since 1946.
A.B., Pomona College, 1936; A.M., Harvard University, 1937.

Claude W. Barlow, Ph.D. 30 King St.
Assistant Professor of Classics since 1947.
A.B., Amherst College, 1928; M.A., Indiana University, 1930; Ph.D., Yale University, 1935.

MORRIS H. COHEN, A.B. 511 Park Ave.
Assistant Professor of Government since 1947.
A.B., University of Chicago, 1939.

JAMES S. EDWARDS, A.M. 6 Richards St.
Assistant Professor of German since 1947.
A.B., Brown University, 1936; A.M., 1938.

H. EARLE JOHNSON, MUS.M. 7 Hawthorne St
Assistant Professor of Music.
Mus.B., Boston University, 1933; Mus.B., Yale University, 1934; Mus.M. 1935. Instructor, 1936-42; Assistant Professor since 1947.

VICTOR B. JOHNSON, A.M. Dodge, Mass.
Assistant Professor of Education since 1947. Associate Dean for Men.
A.B., Upsala College, 1933; A.M., Teachers College, Columbia University, 1941.

JOHN HIRAM BLAIR, M.A. 17 Fiske St
Assistant Professor of Physiology since 1948.
B.A., Wesleyan University, 1937; M.A., 1939.

DAVID LANE, M.A. 26 Minthorne St.
Assistant Professor of Education since 1948.
A.B., University of Maryland, 1941; M.A., Columbia University, 1947.

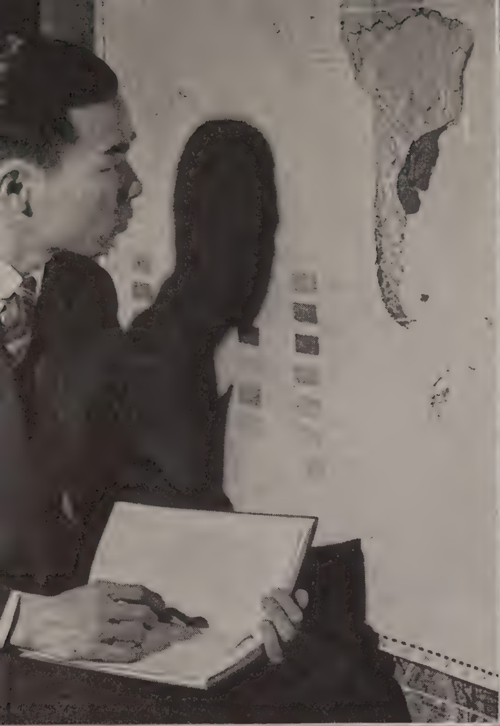
WALTER ANDREW RAMSEY, M.A.
9 Colonial Drive, Cherry Valley, Mass.
Assistant Professor of Romance Languages since 1948.
B.A., University of Cincinnati, 1937; M.A., 1939.

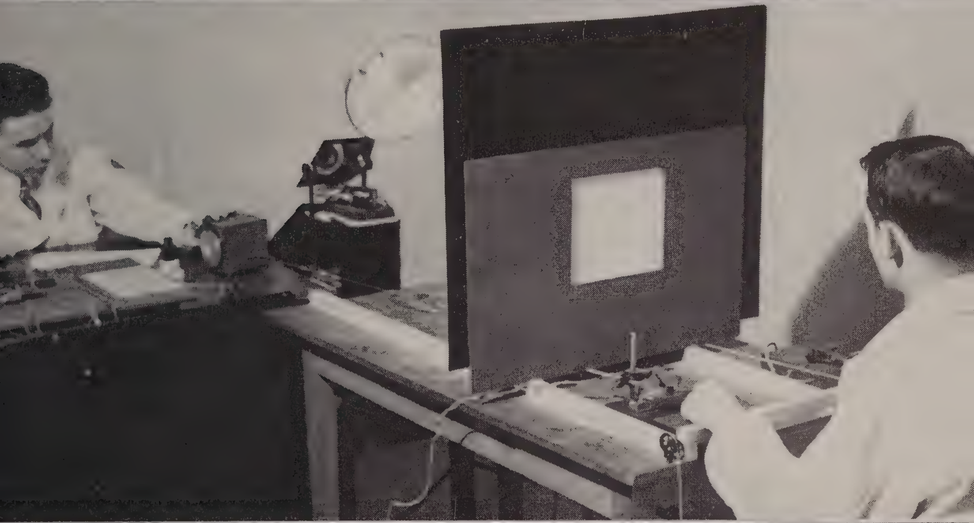
ROCHELEAU Z. GRANGER, JR., M.A. IN ED. Brookfield, Mass.
Director of Physical Education for Men.
B.A., Clark University, 1938; M.A. in Ed., 1939.

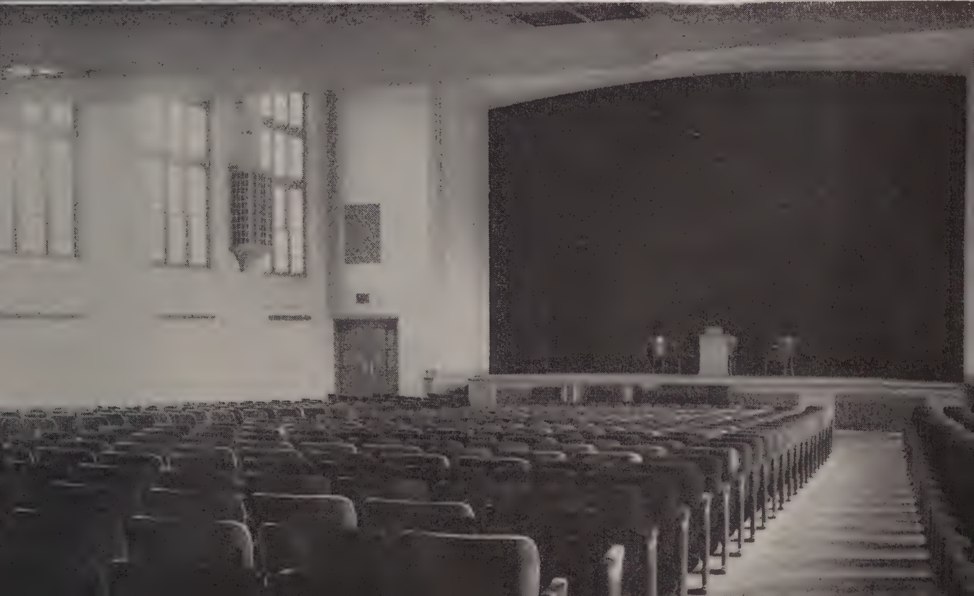
RICHARD BLAZO MARTIN, PH.D. 7 Forestdale Road
Assistant Professor of Chemistry.
A.B., Clark University, 1939; A.M., 1940; Ph.D., 1949. Instructor, 1946-49; Assistant Professor since 1949.

GORDON T. GWINN, PH.D. 4 Stoneland Road
Assistant Professor of Psychology since 1949.
B.A., University of Arizona, 1942; Ph.D., Yale University, 1948.

Estabrook Hall







EUGENE JOHN KELLEY, M.B.A. Leicester, Mass.
Assistant Professor of Economics and Business Administration.
B.S., University of Connecticut, 1944; M.Ed., Boston University, 1948; M.B.A., 1949.

DAVID JOSEPH STANONIS, B.S. 38 Benefit St.
Assistant Professor of Chemistry since 1949.
B.S., University of Kentucky, 1945.

JOHN S. STUBBE, PH.D. South Flagg St.
Assistant Professor of Mathematics since 1949.
B.S., University of New Hampshire, 1941; M.S., Brown University, 1942; Ph.D., University of Cincinnati, 1945.

LESLIE PHILLIPS, PH.D. Worcester State Hospital
Assistant Professor (Affiliate) in Clinical Psychology.
Instructor Affiliate 1946; Assistant Professor Affiliate, 1950.
M.A., University of Chicago, 1944; Ph.D., 1949.

DONALD HENRY LETENDRE, A.M. IN ED. 17 Oberlin St.
Instructor in English since 1946 (January).
A.B., Clark University, 1938; A.M. in Ed., 1939.

GUY HARVEY BURNHAM, A.M. 19 Woodman Rd.
Instructor in Geography since 1946. Cartographer, Graduate School of Geography since 1922.
A.B., Clark University, 1916; A.M., 1922.

HOWARD KIMBALL MOORE, A.M. 1A Melville St.
Instructor in English since 1946.
A.B., Boston University, 1939; A.M., 1940.

CHESTER CUSHING STONE, B.S. 18 High St., Spencer, Mass.
Instructor in Mathematics since 1946.
B.S., Massachusetts State College, 1942.

DONALD E. MACQUEEN, M.A. 22 Richards St.
Instructor in Romance Languages since 1947.
B.A., Adrian College, 1937; M.A., University of Michigan, 1938.

ROBERT N. BECK, M.A. Wilkinsonville, Mass.
Instructor in Philosophy since 1948.
A.B., Clark University, 1947; M.A., Boston University, 1948.

SHELDON SCHAFFER, M.A. 4 Prouty Lane
Instructor in Economics since 1948.
B.A., University of Iowa, 1944; M.A., Yale University, 1947.

ROBERT R. CHRISTIAN, M.A. 1 Harvard St.
Instructor in Mathematics since 1949.
B.S., Yale University, 1947; M.A., 1949.

MARC RAEFF, M.A. 100 Woodland St.
Instructor in Russian History and Language since 1949.
M.A., Harvard University, 1947.

WILLIAM H. CARTER, JR., M.A. 10 Silver St.
Instructor in English since 1949.
A.B., Middlebury College, 1936; A.M., Harvard University, 1938.

PETER E. WELTI, PH.D. 4 Hartshorn Ave.
Instructor in German since 1949.
Ph.D., University of Zurich, 1948.

SAMUEL P. COWARDIN, III., A.M. Southborough, Mass.
Instructor in Fine Arts since 1949.
A.B., Harvard University, 1943; A.M., 1948.

FRANCIS TOURTELLOT, A.M. 768 Main Street
Visiting Instructor in German.
A.B., Brown University, 1935; A.M., 1938.

PHILIP H. BREEN, LL.B. 151 Barnard Rd.
Lecturer in Business Law since 1947 (January).
A.B., The College of the Holy Cross, 1920; LL.B., Boston University, 1923.

ERWIN RAISZ, PH.D.
Visiting Lecturer in Geography, 1949-50.
Diploma, Royal Polytechnicum, Budapest, 1914; M.A., 1924; Ph.D., Columbia University, 1929.

HAROLD ALFRED JOHN GREEN, M.A. 10 Norwood St.
Visiting Lecturer in International Economics.
B.A., Oxford University, 1947, M.A., 1948

CLARK H. CORLISS, B.S. 8 Creswell Rd.
Visiting Lecturer in Sociology, First Semester, 1949-50.
B.S., Middlebury College, 1933.

Walter A. Olson, M.Sc. (Soc. Adm.) 89 Fairhaven Rd.
Visiting Lecturer in Sociology, First Semester, 1949-50.
A.B., Clark University, 1939; M.Sc. (Soc. Adm.), Western Reserve University, 1941.

George P. Murdock, Ph.D. New Haven, Conn.
Visiting Lecturer in Anthropology, Second Semester, 1949-50.
A.B., Yale University, 1919; Ph.D., 1925.

David Rapaport, Ph.D. Stockbridge, Mass.
Visiting Lecturer in Psychology, Second Semester, 1949-50.
Ph.D., University of Budapest, 1938.

ASSISTANTS IN PHYSICAL EDUCATION

Roland C. Lambert, B.S. 1285 Main St.
Assistant Director of Physical Education for Men.
B.S., Springfield College, 1937.

Mrs. Carolyn Lutz Bourdon, B.Ed. 1 Vesper St.
Assistant Director of Physical Education for Women.
B.Ed., University of Buffalo, 1948.

TEACHING FELLOWS

Russell H. Bosworth
History and International Relations.
A.B., University of Massachusetts, 1947; A.M., University of Michigan, 1948.

Edmond L. Escolas
Economics and Sociology.
A.B., Assumption College, 1943; A.M., Clark University, 1947.

Eugene Gollin
Psychology.
B.S. in S.S., College of the City of New York, 1947; M.A., 1948.

Carey B. Joynt
History and International Relations.
A.B., University of Western Ontario, 1945; A.M., 1948.

EDWARD E. LECLAIR, JR.
Economics and Sociology.
A.B., Clark University, 1948; M.A., 1949.

JAMES M. MAHONEY
History and International Relations.
A.B., University of Connecticut, 1947; A.M., 1948.

CLARK W. SIMMONS
History and International Relations.
A.B., Hamilton College, 1947; A.M., Clark University, 1948.

WALTER H. ZUKOWSKI
Economics and Sociology.
B.B.A., Clark University, 1948; M.A., 1949.

Administrative Boards and Committees

THE UNIVERSITY FACULTY

The Faculty consists of the President, the Librarian, and all members of the staff giving regular courses of instruction. It has immediate supervision over the general educational work of the university and is responsible for the nomination to the Board of Trustees of candidates for baccalaureate degrees and for honorary degrees.

Secretary of the Faculty, Dwight E. Lee.

THE UNIVERSITY SENATE

An advisory board appointed by the President.

Samuel J. Brandenburg
Jesse L. Bullock
Robert S. Illingworth
Vernon Jones
Dwight E. Lee
Homer P. Little
James A. Maxwell
Samuel Van Valkenburg

THE GRADUATE BOARD

The Graduate Board consists of the President and representatives of the departments offering advanced graduate instruction. It has general control of the work of the Graduate Division and is responsible for the nomination to the Board of Trustees of candidates for the degrees of Master of Arts and of Doctor of Philosophy.

President Howard B. Jefferson, *ex officio*

Samuel J. Brandenburg
Jesse L. Bullock
Sherman S. Hayden
Vernon Jones
H. Donaldson Jordan
Dwight E. Lee
Arthur F. Lucas
Donald MacGillavry, Jr.
Raymond E. Murphy
David Potter
Percy M. Roope
Samuel Van Valkenburg
Heinz Werner

James A. Maxwell, *Secretary*

THE COLLEGE BOARD

The College Board consists of the President, the Dean of the college, and six members of the Faculty, appointed by the President. It has immediate supervision over the work of the Undergraduate Division, subject to the control of the Faculty, and recommends to the Faculty candidates for the bachelor's degrees.

President Howard B. Jefferson, *ex officio*

Dean Homer P. Little, *ex officio*

Victor B. Johnson
J. Fannin King
Arthur F. Lucas
Paul F. Marble
Percy M. Roope

Rudolph F. Nunnemacher, *Secretary*

THE ACADEMIC COUNCIL

The Council, established by vote of the faculty, is appointed by the President of the University subject to regulations providing for the distribution of its membership among the various divisions and departments.

Its duties are to make recommendations regarding undergraduate educational policies, to check on the program of courses offered to undergraduates and to supervise honors work, senior surveys, and comprehensive examinations.

President Howard B. Jefferson, *ex officio*

Dean Homer P. Little, *ex officio*

Karl O. E. Anderson, *Chairman*

John E. Bell, *Secretary*

Charles T. Bumer
H. Earle Johnson
H. Donaldson Jordan
Richard B. Martin
Theodore Nicol
David Potter
Samuel Van Valkenburg

ADMINISTRATIVE COMMITTEE FOR THE DIVISION OF BUSINESS ADMINISTRATION

President Howard B. Jefferson, *ex officio*
Arthur F. Lucas, *Chairman*

John E. Bell
Samuel J. Brandenburg
George E. Hargest
Homer P. Little
Raymond E. Murphy

THE COMMITTEE ON PERSONNEL AND ORGANIZATION

Elected to advise the President regarding the personnel and the organization of departments.

Homer P. Little, *ex officio*

Karl O. E. Anderson
Jesse L. Bullock
H. Donaldson Jordan
Dwight E. Lee
James A. Maxwell
Samuel Van Valkenburg

THE LIBRARY COMMITTEE

Karl O. E. Anderson, *Chairman*

Sherman S. Hayden
Donald MacGillavry, Jr.

THE STUDENT ACTIVITIES FUND COMMITTEE

Percy M. Roope, *Chairman*

Guy H. Burnham, *Treasurer*
George E. Hargest

STANDING COMMITTEES OF THE GRADUATE BOARD

The President of the university is, ex officio, a member of all committees of the Graduate Board.

THE COMMITTEE ON CREDENTIALS

The committee passes upon applications for admission to the graduate division and makes recommendations to the Graduate Board in respect to fellowships and scholarships and candidacy for graduate degrees.

Samuel Van Valkenburg, *Chairman*
Jesse L. Bullock
Vernon Jones
Dwight E. Lee
Heinz Werner
James A. Maxwell, *Secretary*

THE COMMITTEE ON PROFICIENCY IN FOREIGN LANGUAGES

The committee examines candidates for the degree of Doctor of Philosophy for proficiency in foreign languages.

J. Richard Reid, Associate Professor of Romance Languages
James S. Edwards, Assistant Professor of German
A representative of the students' major department

STANDING COMMITTEES OF THE COLLEGE BOARD

The President of the university and the Dean of the college are, ex officio, members of all committees of the College Board.

THE COMMITTEE ON ADMISSIONS

Sherman S. Hayden
Robert S. Illingworth
Victor B. Johnson
David Potter

THE COMMITTEE ON ATHLETICS

David Potter, *Chairman*
James A. Maxwell
Rocheleau Z. Granger
Henry J. Warman

COMMITTEE ON SCHOLARSHIPS

Homer P. Little, *Chairman*
Samuel J. Brandenburg
David Potter

THE UNIVERSITY

HISTORICAL NOTE

WORCESTER AND THE UNIVERSITY

ORGANIZATION

BUILDINGS AND GROUNDS

THE LIBRARY

ADMISSION

THE ACADEMIC YEAR

TUITION AND OTHER EXPENSES

FELLOWSHIPS, SCHOLARSHIPS AND STUDENT AID

Historical Notes

The Charter of Clark University was granted by the General Court of Massachusetts in 1887. Within two years, in October, 1889, buildings had been constructed, a faculty assembled, and the first students enrolled.

In 1889 there existed in the United States, and especially in New England, reasonably ample provision for undergraduate liberal arts education. On the other hand, there was only one institution, Johns Hopkins University, which placed particular emphasis upon original research and the training of specialists. From 1889 to 1902, Clark University devoted its attention exclusively to graduate study and research, thus performing a unique function in higher education in America.

The long devotion to education and the generosity of Jonas Gilman Clark made possible the establishment of the University which bears his name. In this he was ably assisted by his wife, Susan W. Clark, and by prominent citizens of Worcester, where he had resided since shortly after the Civil War.

For president of the new institution, Mr. Clark and the trustees selected Granville Stanley Hall, noted psychologist of Johns Hopkins University. President Hall organized in Worcester a faculty of brilliant scholars who earned an enviable reputation for the University and decisively shaped its character. In 1900, when the Association of American Universities was founded, Clark University was one of the fourteen charter members.

As time passed, the obligations of the University were extended to include an undergraduate college. In the fall of 1902, in compliance with the will of Mr. Clark, the trustees opened Clark College to the first class of young men who sought, in three years' time, "preparation for citizenship and their work in life." The administration and the faculty of the College were distinct from those of the Graduate School.

From the beginning, Clark College departed from the prevailing type of American college of that day. Seriousness of purpose and hard work on the part of undergraduates were demanded. Admission requirements were flexible, but a high standard of performance was enforced. The degree of Bachelor of Arts was granted after three years of study. Student programs were heavier than was common elsewhere. The liberal ideas of Mr. Clark and the trustees were effectively developed in the educational program presided over by Carroll Davidson Wright, who had resigned as first United States Commissioner of Labor to serve as President of Clark College until his death in 1909. He was succeeded by Edmund Clark Sanford, Professor of Psychology in the Graduate School.

Upon the resignations of Presidents Hall and Sanford in 1920, Wallace Walter Atwood, Professor of Physiography at Harvard University, became president of both the graduate and undergraduate departments of the University. The election of President Atwood marked the addition of geography at the graduate level to the instructional obligations of the University. The Graduate School of Geography, with President Atwood as Director, was organized to function within the general framework of the graduate department.

Significant changes were effected also in the College. The normal period of residence required for the degree of Bachelor of Arts was increased from three years to four. Participation in intercollegiate activities was encouraged. The physical equipment of the University was increased. In 1941, a program leading to the degree of Bachelor of Business Administration was introduced under the direction of the Division of Business Administration. Also in 1941 the Women's College of Clark University was established by the trustees of the University, and since the fall of 1942, women have constituted an integral part of the undergraduate student body. The academic requirements are the same for women and men.

In 1946 President Atwood was succeeded by Howard Bonar Jefferson who, at the time of his selection, was Professor of Philosophy and Director of the School of Philosophy and Religion at Colgate University.

Worcester and the University

When plans for the new University were taking shape in Mr. Clark's mind, he enlisted the aid of a group of far-sighted and influential Worcester citizens from whom, later, the majority of his original Board of Trustees was chosen. In this was set a pattern for cooperation between the University and the community which has persisted throughout the history of the institution. The intellectual life of the city has been enriched by the contributions of the faculty and of distinguished guests whom the University has brought to Worcester. Members of the staff have served local institutions, both public and private, in many ways. The college has opened the door to higher education for hundreds to whom the opportunity would have been denied if they had been forced to seek it elsewhere, while the graduate school has aided the more gifted to proceed to the highest levels of intellectual endeavor. Particularly noteworthy has been the service to teachers in the public school system.

On the other hand, the University has benefited by the support, both financial and intangible, which it has received from the citizens of Worcester. The interchange of services and ideas with the staffs of other Worcester institutions and the opportuntiy to use their libraries on a reciprocal basis have been invaluable. There is particularly close coöperation between the Department of Fine Arts and the Worcester Art Museum, between the Department of History and International Relations and the American Antiquarian Society, and between the Departments of Psychology and Education and the Worcester State Hospital. The Worcester Public Library and the University Library coöperate by avoiding duplication in the coverage of certain subjects and by a corresponding widening of the coverage in the fields assigned to each.

In short, the University is conscious that it is a part of the community and that, as such, it has both obligations and benefits. Its steadfast purpose is to strengthen the pattern of mutual interdependence and coöperation.

Organization

The University includes:

At the graduate level:

The Graduate School offering instruction leading to the degrees of Master of Arts and Doctor of Philosophy.

The Graduate School of Geography offering instruction leading to graduate degrees in Geography.

The Graduate Division of International Affairs offering instruction leading to graduate degrees in International Affairs.

At the undergraduate level:

The College for Men (Clark College) offering a general college course leading to the degree of Bachelor of Arts.

The College for Women offering a general college course leading to the degree of Bachelor of Arts.

The Undergraduate Division of Business Administration offering, to both men and women, vocational training, leading to the degree of Bachelor of Business Administration.

The Library with an endowment separate from the endowment of the teaching branches of the University.

The Clark University Press, associated with the University for the publication of scientific books and journals.

Buildings and Grounds

The University Campus is situated on Main Street about a mile and a quarter from the business center of Worcester. The administrative and educational activities of the University are centered here. On adjacent property facing the campus on Woodland Street, are dormitories, the dining hall, and residences of the President and of the Dean of the College. There is a small athletic field opposite the campus on Maywood Street, providing tennis courts and a running track. A larger field, at the corner of Beaver Street and Park Avenue, is used for soccer, baseball, and other sports. The Hadwen Aboretum, the gift of Obadiah B. Hadwen, is a tract of about twenty acres at the intersection of Lovell and May Streets.

The Main Building (Jonas G. Clark Hall), completed in 1889, is a four-story, granite and brick structure containing about ninety rooms. It houses the general academic offices of the University and the offices and classrooms of most of the departments of instruction.

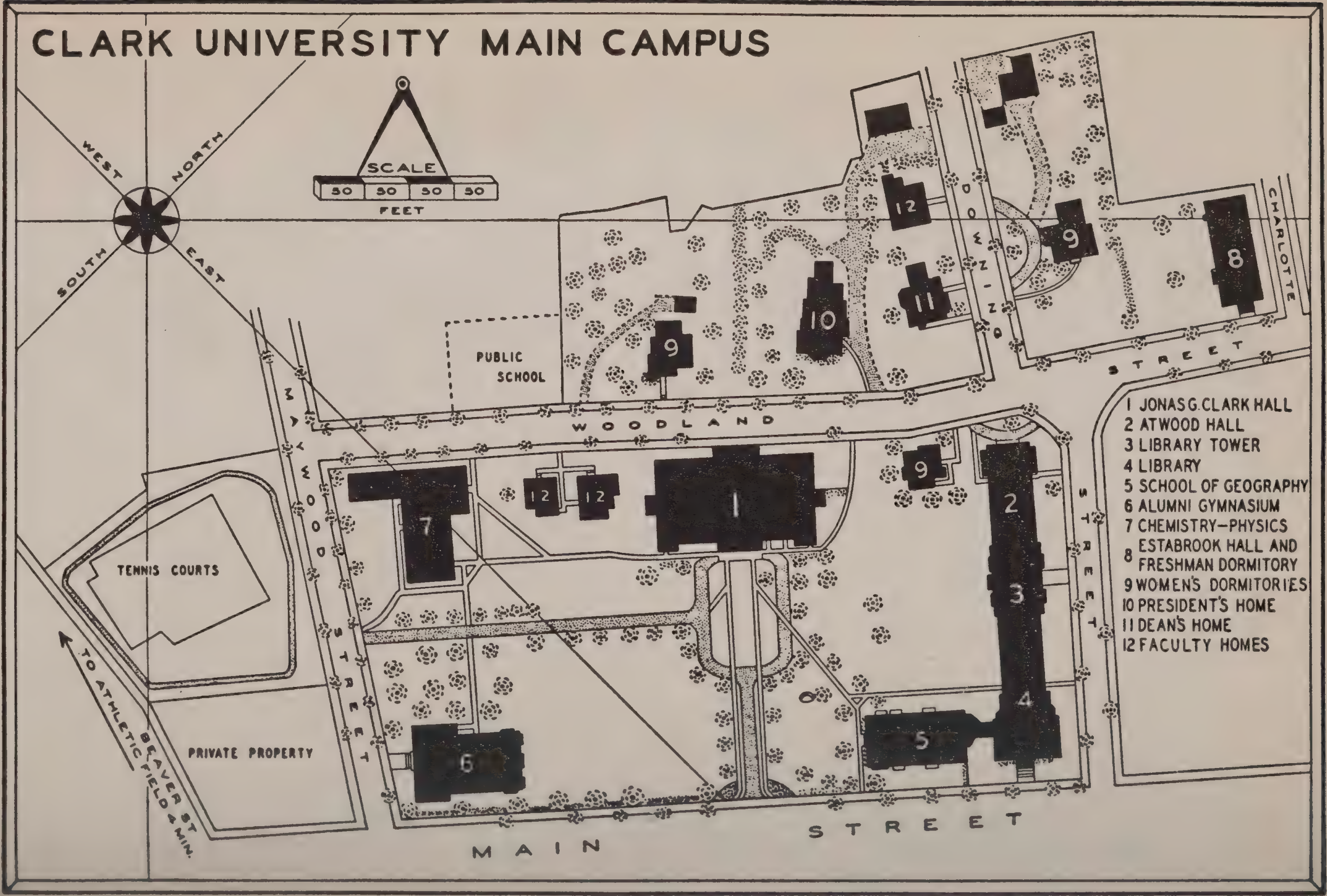
The Science Building, also completed in 1889, houses the Departments of Physics and Chemistry in a solidly built brick structure with interior partitions of brick.

The Library Building, completed in 1903, marked a departure from the style of the older buildings. Its design, which has been followed in all of the later University buildings, is a modern adaptation of the Gothic, using brick as the construction material.

The original building, at the corner of Main and Downing Streets, was enlarged in 1910 by the addition of a wing extending along Main Street. This wing is now used partly for library purposes and also houses the President's office and Graduate School of Geography. A second addition to provide for the growing book collections was added to the library in 1939. This is in the form of a tower which connects the Library Building with Atwood Hall.

Atwood Hall has its entrance on Woodland Street and extends along Downing Street to join the library tower. It provides an auditorium with a seating capacity of 850, which is used for weekly

CLARK UNIVERSITY MAIN CAMPUS



NORTH
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PUBLIC SCHOOL
TENNIS COURTS
PRIVATE PROPERTY
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BEAVER ST
MAYWOOD STREET
WOODLAND STREET
DOWNING STREET
CHARLOTTE
MAIN STREET
1 JONAS G. CLARK HALL
2 ATWOOD HALL
3 LIBRARY TOWER
4 LIBRARY
5 SCHOOL OF GEOGRAPHY
6 ALUMNI GYMNASIUM
7 CHEMISTRY—PHYSICS
8 ESTABROOK HALL AND FRESHMAN DORMITORY
9 WOMEN'S DORMITORIES
10 PRESIDENT'S HOME
11 DEAN'S HOME
12 FACULTY HOMES

college assemblies, dramatic performances, the Fine Arts Course, and other University functions. It is also used for public gatherings.

The Alumni Gymnasium, completed in 1938, is at the corner of Main and Maywood Streets. It provides a playing floor of ample size with seats for 800 spectators. The Gymnasium also contains a comfortable lounging room which provides a convenient and attractive meeting place for various University organizations.

Estabrook Hall, at the corner of Woodland and Charlotte Streets, provides dormitory accommodations for men and contains the University Dining Hall.

There are at present three women's dormitories, Fanning, Blakeslee and Woodland, all located adjacent to the campus.

The Library

ALBERT C. GEROULD, *Librarian*
MARION HENDERSON, *Reference Librarian*
GUY BURNHAM, *Map Librarian*
HELEN J. ELLIOT, *Cataloger* R. WEBB NOYES, *Classifier*

THE LIBRARY, under the terms of the founder's will, was provided with a separate endowment which partly covers its cost of operation and also provides a book fund amounting currently to over $16,000.00. The Library amounts to some 200,000 volumes and receives currently some 800 periodicals and newspapers. Its holdings of periodicals in the fields of psychology and geography are particularly noteworthy. The Library owns some 50,000 maps and 800 recordings.

Mr. Clark's personal collection of books, paintings and other works of art was willed to the University as a separate endowment together with the sum of $100,000 as an endowment for its maintenance and increase.

A room in the Library is set aside to display a selection from Mr. Clark's paintings and his most valuable books. This room also serves to house the Library's phonograph and collection of recordings many of which were given by the Carnegie Corporation.

Under the will of the late Colonel William Libbey, for many years professor of Geography at Princeton who died in 1927, the University was the recipient of his distinguished collection of books and periodicals.

The personal library of President Hall was left by him to the University and is now housed in the offices of the Department of Psychology and Education.

Admission

Four classes of students are accepted in the University:

1. Graduate students, candidates for the degrees of Master of Arts, Master of Arts in Education, and Doctor of Philosophy; also other mature persons with the necessary educational background. See announcement of the Graduate Schools.

2. Undergraduates, candidates for the degrees of Bachelor of Arts and Bachelor of Business Administration. Such candidates may be full time or part time students. See announcement of the undergraduate Colleges.

3. Part Time Students, candidates for an undergraduate degree who for some reason do not carry more than three courses at a given time.

4. Special Students, persons not prospective candidates for a degree, who wish to take advantage of the opportunities for study provided by the University and who give satisfactory evidence of adequate preparation for the work which they wish to undertake.

An applicant who holds a bachelor's degree may be admitted as a *special student non-graduate* if he does not intend to proceed to a graduate degree and does not intend to enroll in graduate courses (courses designated by a number beginning with 3). A special student non-graduate may enroll in courses beginning with 2, but will receive no graduate credit for such courses.

All special students are under the supervision of the College Board.

No applications from beginning freshmen are considered for the term opening in February, although a limited number of transfer students will be accepted.

Auditors may be admitted at the discretion of the administrative officers of the University. They are not enrolled as students in the University and do not pay the matriculation fee.

The University reserves the right to require the withdrawal at any time of any student whose record in either conduct or scholarship fails to meet the expectations implied by his admission.

Requests for information and for application forms to the College should be addressed to The Dean, Clark University, 950 Main Street, Worcester (3), Massachusetts. Similar requests for the Graduate School should be addressed to the chairman of the department in which the applicant is interested.

The Academic Year

The academic year for 1949-50 is thirty-four weeks long, divided into two approximately equal semesters. This period is supplemented by a summer term slightly over six weeks in length.

The academic year begins on the Monday before the fourth Thursday in September and ends, in 1950-51, on the Saturday before the thirty-eighth Monday.

Students are expected to be present on the first day of each term and to continue in attendance from day to day to the end of the term.

Tuition and Other Expenses

In accordance with the express wish of the founder, the University has consistently aimed to keep its tuition and other fees as low as possible. The tuition has been raised from time to time in response to urgent need, but is still well below that charged by many similar institutions.

MATRICULATION FEE

A matriculation fee of $5.00 is required of all regularly enrolled students in Clark University.

Auditors are not required to pay the matriculation fee.

Official statements of record are issued by the Recorder for matriculated students only.

TUITION

The regular academic year. Tuition for undergraduates with programs of four or five courses is $400 for the academic year. Undergraduates and special or part time students who enroll for fewer than four or more than five courses pay $80 per course, $40 per half course. (For definition of a course and half-course, see Requirements for the Degree of Bachelor of Arts.)

Each undergraduate and special student carrying four or more courses pays also a yearly activities fee of $20 which is collected with the tuition.

Tuition for graduate students with normal programs, excepting those in the Clinical Training Program in Psychology, is $400 per year. Graduate students who enroll for less than a full program are charged at the rate of $80 per course.

Tuition for students in the Clinical Training Program in Psychology is $500 for the academic year.

One half of the annual tuition, laboratory and activities fees is collected at the beginning of each semester.

If tuition is not paid within ten days after the beginning of a semester the enrollment of the student lapses. A student whose enrollment has thus lapsed may be re-enrolled, with the permission of the proper administrative officer, on payment of the overdue tuition with an additional fee of $2.

Summer term. Tuition in the summer term, with a normal program of two subjects, is $80 for the session. The tuition for a single subject is $40.00.

Tuition is due and payable at any time before 5 P.M. of the Thursday following the opening of the summer term.

REFUND OF TUITION

The following regulation was adopted by the trustees on March 28, 1931:

"No refund of tuition and no release of obligation to pay tuition shall be made because of failure for any reason on the part of a student to complete the work of any semester after it is begun."

LABORATORY FEES AND DEPOSITS

Laboratory fees, payable at the time of registration, are charged in undergraduate laboratory courses as follows:

$10-$30 for each course.

$5-$15 for each half-course.

A breakage deposit is required in all undergraduate laboratory courses in chemistry. These deposits are collected by the Bursar, at the time of registration, according to the following schedule:

$30 for any two of the above courses taken concurrently.

$10 for each course, excepting those listed above.

$5 for each half-course, excepting those listed above.

The Bursar returns any unused balance or collects any charge for breakage in excess of the deposit, after the course is completed.

Graduate students taking undergraduate courses pay the same fees and deposits as undergraduates.

A deposit of $25 is required at the beginning of the year from each graduate student in the department of chemistry. Ordinary supplies and materials are charged to the student's account at cost. Any balance remaining is refunded at the end of the year.

DIPLOMA FEES AND PUBLICATION FEES

For a bachelor's degree, the diploma fee, $5, is due at the beginning of the term in which the candidate expects to complete work in residence for the degree.

For a master's degree, the publication fee, $10, and the diploma fee, $10, are due when formal application for admission to candidacy for the degree is filed.

For the degree of Doctor of Philosophy, the publication fee, $15, and the diploma fee, $25, are due when formal application for admission to candidacy for the degree is filed.

MISCELLANEOUS FEES

Each freshman pays an induction period fee of $5.00.

The activities fee is $20.00.

Graduate students who use the gymnasium pay a fee of $10 per year.

Graduate students in geography pay in addition to the regular tuiton, a camp fee, a workroom fee and a classroom-materials fee. For details see the announcement of the Graduate School of Geography.

Students who elect Fine Arts 1 pay a fee of $10 in addition to the regular tuition.

Students who elect History 10 pay a fee of $1 in addition to the regular tuition.

DINING HALL

Board at the dining hall is furnished at a reasonable rate which has varied from year to year. During the current year the charge is $10.50 per week, with *no refunds for absences except in cases of protracted illness.*

Undergraduates who do not live in their own homes are required to board at the dining hall. This fact must be recognized and subscribed to by all who seek admission. Board is payable *in advance* by the week, month or semester.

DORMITORIES

Freshman men not living in their own homes or with near relatives are required to room in Estabrook Hall.

Women students who do not live in their own homes or with near relatives are required to room in one of the Women's Dormitories.

The charges for rooms in Estabrook Hall are as follows:

For all rooms, except those on the mezzanine floor:

Suite of two rooms occupied by two men, $140 per year for each occupant.
Suite of two rooms occupied by one man, $165 per year.
Single room occupied by two men, $120 per year for each occupant.
Single room occupied by one man, $150 per year.

For rooms on the mezzanine floor:

Single room occupied by two men, $125 per year for each occupant.
Single room occupied by one man, $150 per year.

The charges for rooms in the Women's Dormitories are as follows:

Single room occupied by one student, $165 per year.
Double room, $125 per year for each occupant.
Triple room, $100 per year for each occupant.

Dormitory room rent is payable either in advance or one-fifth at the beginning of each semester and one-tenth on the first day of November, December, January, March, April and May. Each student is required to deposit $25 before occupying a room. This deposit is returned, less a charge for lights and for any damages to the room or its furnishings, after the key to the room is surrendered to the Bursar.

Rooms are assigned to freshmen in order of application, when the application is accompanied by the deposit of $25. Students who indicate a desire for a room together will be accommodated whenever possible. Rooms not required for freshmen may be rented by upper classmen or by graduate students. Such vacancies are, however, rare.

COLLEGE EXPENSES—SUMMARY

A student in the college who lives in the dormitory and boards at the dining hall will find that the necessary cost for a college year (September to May) is about $975 in addition to personal expenses.

This expense is distributed as follows:

Annual fees	
Tuition	$400.00
Room rent*	100 to 165.00
Board (34 weeks at $10.50)	357.00
Activities Fee	20.00
Laboratory fees (estimated)	5.00 to 30.00
Books and supplies (estimated)	50.00
Total	$932.00 to 1022.00
Non-recurring fees, collected in the first year only	
Matriculation fee	$5.00
Induction period fee	5.00

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*Rent in Quonset huts is at the rate of $2.50 per week.

Fellowships, Scholarships and Student Aid

In addition to the fellowships and scholarships provided by the University from endowed funds and other sources there are available throughout the United States numerous scholarships and fellowships supported by philanthropic foundations, fraternal organizations or large commercial enterprises. These are frequently awarded competitively on a nation-wide or a state-wide basis.

Many scholarships, especially at the college level, are provided by local sources of various kinds. Any person who is interested in, or dependent on, aid in the form of fellowships and scholarships for the furtherance of his education may find it advantageous to inquire about such offerings from school officials, churches, fraternal organizations, chambers of commerce, etc.

Loans for educational purposes are also available from similar sources.

GRADUATE FELLOWSHIPS, SCHOLARSHIPS AND ASSISTANTSHIPS

Graduate fellowships and scholarships are available for prospective candidates for the degrees of Master of Arts and Doctor of Philosophy at Clark University. Appointments are made on the basis of scholarly promise and seniority and on the recommendation of the departments. The number of appointments available in any department vary from year to year. Fellows and scholars are expected to coöperate with the staffs of the various departments, and may by mutual agreement undertake limited responsibilities. They are never called upon to perform services which would interfere with the completion of a full-time program of graduate study.

Teaching fellowships are available in certain departments. These involve a specified amount of instruction with stipends which vary according to the amount of service agreed upon.

Stipends for graduate fellowships are provided by the income of the George Hoar Fund which was given to the University by Andrew Carnegie, and from other special funds.

Assistantships are available in several departments. These positions involve a variety of services with stipends to correspond, and usually provide the student with experience which will be useful in his later professional work.

Appointments to fellowships and scholarships are announced about April first in accordance with an agreement among the members of the Association of American Universities. Assistants may be appointed at any time.

Inquiries concerning any of the above types of appointment should be addressed to the chairman of the department concerned.

STUDENT AID FOR GRADUATE STUDENTS

Student aid is available from the following funds, with the restrictions noted.

The John White Field Fund. This fund of five hundred dollars was established by Mrs. Eliza W. Field. The income is to provide for the minor needs of a scholar or fellow.

The George S. Barton Fund. The income from this fund of five thousand dollars is devoted to aid some one or more worthy native born citizens of the City of Worcester.

The Eliza D. Dodge Fund. The income of this fund of one thousand dollars is granted to graduate students of limited means who are engaged in research work.

The Chester Bland Fund. The income of this fund is preferably used to provide aid to a promising student, either in residence or engaged in research elsewhere under the direction of the department of History and International Relations. It may also be used to defray the expense of visiting lecturers or of departmental research.

The Morton L. "Sonny" Lavine Foundation. The income from this memorial to Lieutenant Lavine of the United States Army, World War II, is to be used in the promotion of research in the Department of History and International Relations. The fund amounts to $1000.

Alumni Association Fund. This scholarship fund for the benefit of students who are studying for the degree of Doctor of Philosophy was provided by alumni who hold that degree.

LOANS FOR GRADUATE STUDENTS

Loans are available for graduate students from the following funds. These loans bear interest at four per cent per year.

ALUMNI LOAN FUNDS. Loans from these funds are available on suitably endorsed notes. Applications require the approval of the student's major department, the Committee on Credentials of the Graduate Board, and the chairman of the Alumni Loan Fund Committee.

THE MARY S. ROGERS SCHOLARSHIP AND LOAN FUND has been able, since its founding in 1926, to care for every need for loans in the Graduate School.

THE SARAH M. THURBER LOAN FUND was established by the late Dr. Charles H. Thurber, former president of the Board of Trustees, as a memorial to his mother. This fund is administered by the president of the university.

UNDERGRADUATE SCHOLARSHIPS

Undergraduate scholarships are generally awarded on the basis of pecuniary need with due regard to character and ability. Such scholarships are provided from a variety of sources and vary in amount. Some of them are restricted to residents of a definite locality, or to those studying particular subjects.

Scholarships are awarded at the beginning of each semester. Ordinarily a scholarship for the first semester will be continued through the second semester if the recipient maintains a scholarship record which places him in the upper half of his class.

To be eligible for a scholarship award an entering student must have had a scholarship average which placed him in the upper third of his class for his course. To be eligible for a scholarship in college a student must have maintained an average in the upper half of his class for the preceding semester.

Applications for undergraduate scholarships should be filed at an early date on forms which may be secured from the college office.

Ellis-Hubley Competitive Scholarship. The sum of $600.00 has been set aside from the income of funds bequeathed in memory of Gordon A. Hubley, Clark 1910, and of Theodore T. and Mary G. Ellis, to establish a special competitive scholarship for male residents of Worcester who have graduated from a Worcester secondary high school. Candidates must be recommended to the Committee on Scholarships by the Principal or Headmaster of the school which the candidate is attending. The award will normally be continued for the four year course.

The Jonas G. Clark Scholarships, established by the trustees, provide either full tuition or half tuition for undergraduate male and female students from outside of Worcester.

The Theodore T. and Mary G. Ellis Scholarships provide either full tuition or half tuition for male or female residents of Worcester who are students in "the collegiate department of Clark University."

The Sanford Memorial Scholarship Fund, established by alumni of the university in honor of Edmund C. Sanford, president of Clark College from 1909 to 1920, provides an annual scholarship amounting at present to approximately $200 for a male undergraduate.

The Livermore and Ambulance Scholarship was endowed by citizens of Worcester in honor of Charles Randall Livermore, the first Clark man to fall in battle in the first World War, and of his companions in the Clark Unit of Ambulance Drivers. Fifty dollars or more is awarded annually on the basis of academic success, character, and usefulness to the college. This scholarship is for male undergraduate students who are residents of Worcester County.

The Henry A. Willis Fund provides scholarships for male students from Fitchburg, Massachusetts, and vicinity. In the absence of suitable candidates from this community grants may be made to others.

The Helen Brewster Randolph Memorial Scholarship Fund, established by the late Professor Charles B. Randolph, provides about $250 annually for scholarships for male college students, preferably those whose "major" is a foreign language.

THE GORDON A. HUBLEY SCHOLARSHIP FUND was bequeathed by Alice B. Hubley in memory of her son, a graduate of the college in the class of 1910. The income is to be used for the assistance of male undergraduates who are residents of Worcester.

THE B'NAI BRITH SCHOLARSHIP, provided by the Worcester Chapter, Order of B'nai Brith, is primarily but not exclusively for the aid of Jewish students.

THE PROBUS CLUB OF WORCESTER offers an annual scholarship of one hundred dollars.

THE HARRY G. FAGER SCHOLARSHIP of the Odin Club is awarded annually to some young man who possesses superior scholarship and personality, has limited means and is of Scandinavian blood. This scholarship, $200, is awarded every second year to a student at Clark University.

THE CLARK UNIVERSITY FACULTY WOMEN'S CLUB offers scholarships to undergraduate students, either men or women, who rank high in intellectual and personal qualities.

THE CLARK UNIVERSITY ALUMNAE ASSOCIATION customarily offers two scholarships to students in the Women's College.

Aid given in the form of scholarships is not regarded as a loan. It is recognized, however, that those who receive such aid may wish to return the amount in later years. Any sums received from this source will be added to the Alumni Loan Fund of the College or to any designated scholarship fund.

UNDERGRADUATE LOANS

Loans are covered by endorsed notes payable at a fixed date and bear interest at the rate of 4 per cent per year. Interest received from loans is in all cases added to the fund from which the loan was made.

Loans from the funds described below are made to undergraduates by the Dean of the college in coöperation with the Alumni Committee on Loans.

The Alumni Loan Fund is a permanent revolving fund established by the trustees and the alumni. To this has been added a fund of about $500 contributed by L. Kelly Foster, C. B. L. Kelley, Isador Lubin, H. M. Smith, and others.

The Estabrook Loan Fund was created by the generosity of the late Arthur F. Estabrook of the Board of Trustees.

The Haskell Talamo Loan Fund has been established by relatives and friends of the late Doctor Haskell Talamo, A.B., Clark University, 1916.

The Louis N. Wilson Fund, established by the first librarian of Clark University, is a loan fund for male students in the college.

GRADUATE AND UNDERGRADUATE PROGRAMS

THE GRADUATE SCHOOL

THE GRADUATE SCHOOL OF GEOGRAPHY

THE GRADUATE DIVISION OF INTERNATIONAL AFFAIRS

THE MEN'S COLLEGE (Clark College)

THE WOMEN'S COLLEGE

THE DIVISION OF BUSINESS ADMINISTRATION

The Graduate School

Admission to the Graduate School is open to properly qualified persons, both men and women. Instruction and opportunities for study leading to the degrees of Doctor of Philosophy and Master of Arts are offered in the following subjects:

Chemistry
Economics
Geography
History
International Affairs
Psychology

Work leading to the degree of Master of Arts is also offered in the following subjects:

Biology
Education (Master of Arts in Education)
Physics
Sociology

Courses of an advanced nature in other subjects may, with the consent of the Graduate Board, be included in the programs of graduate students.

ADMISSION TO THE GRADUATE SCHOOL

Admission is granted only by the Graduate Board on recommendation of a department.

Application. A prospective applicant should communicate with the department in which he expects to do his major work. If he is encouraged by the department to make application, he will receive the application blanks and should submit them to the chairman of the department with an official transcript of undergraduate work, letters of recommendation from two persons who are competent to judge his qualifications, and a recent photograph (passport size preferred).

In addition, applicants for admission to the graduate school are strongly urged, and may be required, to submit a record of attainment in the Graduate Record Examination. This examination tests general knowledge in the field of study covered by the curriculum of the liberal arts college. It is useful as an indication of the general preparation of the student, and as a guide in planning his course of study.

Admission. In granting admission, the Graduate Board may, with the advice of the department, prescribe a minimum period of residence, never less than one year, and other definite requirements, including courses in particular subjects, as prerequisites for a graduate degree. Admission to the Graduate School does not imply admission to candidacy for a degree. Admission to the Graduate School is granted for entry only at a specified time, and lapses if the student fails to enter at that time. If, after an applicant has entered as a regular student, his period of graduate study is broken by more than a year, he must make formal application for reinstatement.

Admission of seniors to graduate courses. Seniors in Clark College who rank in the upper third of their class may, in exceptional cases, be admitted to courses primarily for graduate students provided petitions for admission are approved by the College Board and the secretary of the Graduate Board.

SCHOLARSHIPS, FELLOWSHIPS, AND STUDENT AID

Scholarships and fellowships are available for prospective candidates for the degrees of Master of Arts and Doctor of Philosophy respectively. Application for a scholarship or fellowship should be made before March first to the chairman of the department in which the applicant expects to do his major work. Applications, after being endorsed by the departments, are acted upon by the Graduate Board.

According to an agreement of members of the Association of American Universities, the elections of fellows and scholars will be communicated on April first, but not before, to each member of the Association and to each successful candidate.

Some fellowships are designated as research fellowships or teaching fellowships, with the consent of the applicant and on the recommendation of the department, in cases where research or teaching assistance in the department is to be a duty of the fellow.

Assistantships are available in certain departments. Appointments to these positions are usually made from the list of fellows. Application should be made to the chairman of the department.

Stipends for fellows and scholars, other student aid and educational loans for graduate students are provided by the income of special funds which are listed elsewhere under the heading, "Fellowships, Scholarships and Loan Funds."

THE DEGREE OF MASTER OF ARTS

An academic year of full-time study in residence, or its strict equivalent in summer sessions and part-time study, is a minimum requirement for a master's degree. Residence study is broadly defined as graduate work done at Clark University under the immediate personal supervision of at least one member of the university faculty.

A reading knowledge of a foreign language, usually French or German, may be required of candidates for the degree of Master of Arts at the discretion of the major department.

Application for admission to candidacy for a master's degree should be filed with the Secretary of the Graduate Board not later than the first week of the last full semester which the student expects to spend in residence as a candidate for this degree. Applications will be considered by the Graduate Board when the student has:

1. Completed one semester of full-time graduate work or its equivalent in residence at this university;
2. Paid the diploma fee ($10) and publication fee ($10);
3. Obtained the written endorsement of his major department.

Candidacy for the degree of Master of Arts will, unless extended by action of the Graduate Board, hold good for three years from the date of admission to candidacy. For satisfactory reasons, candidacy may be extended once for an additional period of three years by vote of the Graduate Board. When the candidacy expires without the degree having been awarded, the diploma and publication fees, less any expenses incurred, are returned.

Each student must meet a minimum course requirement of five courses, or their equivalent in half courses. The program must be approved by the major department. One of the courses may be a research course devoted to the preparation of the basis. The thesis will be written on a topic in the field of the student's special interest under the supervision of a member of his major department. A copy of the thesis, together with two copies of an abstract, both approved by the supervising instructor, must be deposited in the Recorder's office not later than three weeks before the date of the commencement at which the degree is to be conferred. A second copy together with an abstract must be delivered to the major department. The abstract must not exceed 600 words in length. The thesis and one copy of the abstract are deposited by the Recorder in the University Library. Each candidate must make a satisfactory record in such written examinations as may be required by the major department, and in a final oral examination by a committee of three or more, two of whom must be members of the Graduate Board.

THE DEGREE OF DOCTOR OF PHILOSOPHY

Only such candidates as give evidence of general proficiency, power of investigation, and high attainments in the special field in which their major subjects lie will be encouraged to proceed to the degree of Doctor of Philosophy.

Foreign languages. A prospective candidate for the doctor's degree is advised to prepare himself early for the oral examinations in the reading of modern foreign languages. French and German are required except in cases where the Graduate Board may authorize the substitution of another language for one of these. A student must pass the foreign language examinations before he will be permitted to take the preliminary examination for the degree of Doctor of Philosophy. These examinations are conducted by a committee composed of representatives of the modern language departments and a representative of the student's major department. The committee reports the results of the examination to the Recorder. Additional language requirements may be imposed by the student's major department.

Admission to candidacy. Applications for admission to candidacy must be filed not later than November first in any academic year, by students who hope to receive the degree at the end of that academic year. An application for admission to candidacy will be considered by the Graduate Board when the applicant has:

1. Completed two full academic years of graduate work (or its equivalent in part-time work), one of which must be at Clark University;
2. Passed the required examinations in foreign languages;
3. Passed a preliminary examination in his chosen fields of study;
4. Paid the diploma fee ($25) and publication fee ($15);
5. Obtained the written endorsement of his major department.

Candidacy for the degree of Doctor of Philosophy holds good for three years from the date of admission to candidacy. For satisfactory reasons, candidacy may be extended once for an additional period of three years by vote of the Graduate Board. When candidacy expires without the degree having been awarded, the diploma and publication fees, less any expenses incurred, are returned.

Dissertation. A dissertation which is expected to make an original contribution to some special field of knowledge is required of each candidate.

The dissertation, with comments of the chief instructor and other readers, is laid before the examining committee at the final oral examination.

An abstract of the dissertation, approved by the instructor under whom it was written and not exceeding 1200 words in length, is also required.

Two copies of the dissertation and three copies of the abstract must be provided in a form which is prescribed and each copy must be signed by the chief instructor.

Four weeks before the date of the Commencement at which the degree is to be conferred, one completed copy of the dissertation and two copies of the abstract must be deposited in the office of the University Recorder. This copy of the dissertation and one copy of the abstract are deposited in the University Library where they remain permanently.

At the same time a second copy of the dissertation and a copy of the abstract must be delivered to the major department. These may be retained in the department or deposited in the library for loan purposes.

Final examination. The final examination is oral and lasts for at least two hours; additional written examinations may be given if the major department so directs. The candidate is expected to defend his dissertation and, at the discretion of the examining committee, may be questioned on the entire special field of his study. The oral examination is conducted by a committee of at least four members, including the chairman and one other member of the major department, a member of the Graduate Board under whom the candidate has done no work (unless such a member has participated in the preliminary examination of the candidate), and such other members of the Graduate Board as may be duly appointed. The president of the university is authorized to invite any person from within or without the university to be present and to assist in the examination.

The Graduate School of Geography

SAMUEL VAN VALKENBURG, PH.D., Director of the Graduate School of Geography and Professor of Geography.

RAYMOND E. MURPHY, PH.D., Professor of Economic Geography; Editor, *Economic Geography*.

RICHARD J. LOUGEE, PH.D., Associate Professor of Physiography.

HENRY J. WARMAN, PH.D., Associate Professor of Geography; Secretary of the Graduate School of Geography.

*EDWARD C. HIGBEE, PH.D., Associate Professor of Geography.

GUY H. BURNHAM, A.M., Cartographer and Instructor in Geography.

VISITING PROFESSORS AND SPECIAL LECTURERS, 1949-50

CHARLES B. FAWCETT, PH.D., Former Head, Department of Geography, University College, London, England.

CLARENCE F. JONES, PH.D., Professor of Geography, Northwestern University, Chicago, Illinois.

OLOF JONASSON, PH.D., Professor of Geography, University of Göteborg, Göteborg, Sweden.

*EDWARD C. HIGBEE, PH.D., Johns Hopkins University, Land Use Consultant, Fall Field Camp.

ERWIN RAISZ, PH.D., Harvard University; Special Lecturer in Cartography.

The Graduate School of Geography offers opportunity to properly qualified students for advanced training in geography. The map collection, libraries, and special laboratories for cartography and interpretation of aerial photographs, provide unusual facilities for research work in residence. The staff, composed of specialists in their various fields of geography, must spend part of their time in travel and field studies. A Staff member edits the magazine, *Economic Geography*. While in residence, the Staff members offer regular courses of instruction and direct advanced students in research work. Special lecturers, both American and foreign, supplement the regular staff. Not all courses of instruction are offered each year; many are given in alternate years. All graduate students are encouraged to undertake independent field studies as part of their university work.

* Not on the staff, 1949-50

GRADUATE WORK IN THE SCHOOL OF GEOGRAPHY

Work is offered leading to the degrees of Master of Arts and Doctor of Philosophy in Geography. Candidates for the master's degree will pass written examinations in at least six of the following fields: physiography, climatology, soils and land utilization, plant geography, economic geography, human geography and cultural geography, regional geography, and political geography. The oral examination for the master's degree covers four fields approved by the Staff. The master's degree requires two years except for those whose preparation has been adequate enough in fundamentals to enable them to qualify in less time.

Candidates for the doctor's degree in geography will pass written examinations in the above fields, and a general oral examination covering six major fields approved by the staff In general, a year of work beyond the master's degree should prepare a candidate for the general examination preliminary to his acceptance as a candidate for the doctor's degree and to his concentration work for his dissertation. This year of course work may well include, besides certain advanced courses in geography, related advanced studies in biology, economics, history and international relations.

THE FIELD CAMP

A distinctive feature of the Graduate School of Geography is the autumn field camp of three weeks' duration at the beginning of the fall term. All resident prospective candidates for graduate degrees in geography are expected to attend the field camp each autumn. The field program includes studies in physiography, land utilization, industrial geography and weather observations, with special training in mapping and other field techniques. Cars, scientific instruments and other equipment are provided. Suitable field clothing and blankets must be provided by the individual student. Following return to the campus, about ten days are allowed for completion of field reports. Formal course work begins on the second Monday after the close of the field camp.

Formal course work in geography ends about May 1st, leaving students free to read and to coördinate their work prior to the examination period.

STUDENTS' FEES

All geography students in residence must pay in addition to the general university fees, the camp fee, the workroom fee, and the classroom-materials fee.

The camp fee, determined on a cost basis, varies between $50 and $80, payable to the camp director on or before the first day of camp. For a student taking the field course only, the tuition fee is $25 in addition to the camp fee. The camp fee covers board and lodging, transportation, maps, drafting supplies and the use of meteorological instruments and other equipment for the three weeks' period.

The workroom fee, $5 a semester, is payable to the department November 1st and March 1st. It helps maintain the geography workroom and equipment used by graduate students—alcove desks, files of maps, card catalogue, drafting tables and instruments, and adding machines.

The classroom fee, $5 a semester, is payable November 1st and March 1st to the department. It is for mimeographing and for the maintenance, in part, of the classroom wall maps and other equipment, and for the expense of meteorological materials.

COURSES IN GEOGRAPHY

The following courses were given in 1949-50. The numbers indicate courses as described under "Geography" in the alphabetical list of departments and courses of instruction unless other information is given.

10, 12a, 383a, b, 20b.	Mr. Warman
16, 36, 361a, 387b.	Mr. Murphy
201, 32, 300, 385a.	Mr. Van Valkenburg
18, 314, Map Interpretation.	Mr. Lougee
191, 291.	Mr. Burnham
30. Seminar.	Staff
300. Ph.D. Seminar.	Mr. Van Valkenburg
399a. Field Studies.	Staff
391.	Visiting Professor Raisz
27a, b, 37.	Visiting Professor Fawcett
33b, 385c, Scandinavia.	Visiting Professor Jonasson

Courses in Geography which are to be offered in 1950-51 will be found listed, with descriptions, under "Geography" in the list of Departments and Courses of Instruction.

The Graduate Division of International Affairs

GEOGRAPHY, DIPLOMACY, ECONOMICS

ADMINISTRATIVE COMMITTEE

James A. Maxwell, *Professor of Economics.*

Samuel Van Valkenburg, *Director of the Graduate School of Geography*

Dwight E. Lee, *Professor of Modern European History*

The Graduate Division of International Affairs aims to meet a demand for graduate work which will be devoted entirely to the general field of international affairs and which will include work in geography, history and international relations, and economics. This division groups together appropriate courses and seminars in order to prepare graduate students for the government service of the United States, college and university professorships in international affairs, posts in corporations and banks doing foreign business, and research and administrative positions in the field of world affairs. The courses include offerings in political, regional and economic geography; foreign trade, commerce, and finance; international law; modern and diplomatic history; and the foreign policy and international relations of the United States.

ADMISSION

Qualified graduate students who are interested in International Affairs are admitted either in the Department of History and International Relations or in the Department of Economics and Sociology or in the Graduate School of Geography. Inquiries and applications may be addressed to any one of them.

PROGRAMS

Programs in International Affairs are adjusted to the special interests of the individual students. Programs are arranged in consultation with the staff and require the approval of the committee in charge of the division.

The Men's College

CLARK COLLEGE

The college offers a general program leading to the degree of Bachelor of Arts, and a vocational program leading to the degree of Bachelor of Business Administration.

ADMISSION TO THE FRESHMAN CLASS

Inquiries regarding admission and requests for blank forms should be addressed to the Dean of the College, Clark University, Worcester 3, Massachusetts. Application for admission should preferably be made either at the end of the junior year or immediately at the end of the first semester of the senior year of secondary school. A deposit of $20 is required with the application. This is returned if the applicant is not admitted. No refund of deposit will be made if the applicant is admitted and then fails to register. If the applicant is admitted, this deposit is retained by the University and is credited on the applicant's first tuition bill. *No application received after May 1 can be promised consideration.*

An applicant for admission to the freshman class is required to furnish satisfactory character references. He must also furnish his records from all preparatory schools which he has attended. Records of entrance examinations which he may have taken and of action by any other college in respect to his admission are also required. Records of scholastic aptitude tests are of value.

The completion of a four-year high school course or its equivalent, including fifteen acceptable units of credit, is normally required for admission to the freshman class. The term "unit" is understood to mean approximately one-quarter of the pupil's normal program of work for the school year.

The fifteen acceptable units of credit which are required for admission as a candidate for the degree of Bachelor of Arts must include:

Required subjects, 7 units.
    English, 3 units (4 years).
    *Mathematics, 2 units (algebra and geometry).
    †Foreign language, 2 units of a single language.

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*Applicants expecting to specialize in "science" are advised to present at least 3 units of mathematics.

†Normally required.

Restricted electives, 5 or more units chosen from:
- Foreign language, 2, 3, or 4 units. (The college does not accept less than 2 units in any foreign language.)
- Social sciences, 2 or 3 units (history, government, civics, economics, etc.)
- Natural sciences, 2 or 3 units (physics, chemistry, biology, etc.)
- Mathematics, 1 or 2 units (in addition to required units).

Free electives; not more than 3 units, at the discretion of the committee on admissions, in subjects recognized by the applicant's preparatory school in its regular program.

Quality Requirements. Applicants whose references are satisfactory and who are certified in fifteen acceptable units may be admitted without conditions. A principal may also give blanket certification without consideration of specific subjects. In doing so he accepts complete responsibility for the student's success in college.

Applicants who present fourteen certified units and one pass unit may be admitted with *one condition* (see below); applicants who present thirteen certified units and two pass units may be admitted with *two conditions.* No applicant with less than thirteen acceptable units of certified credit or its equivalent will be accepted without examination unless his average grade places him in the highest quarter of the class with which he graduates from high school. Applicants who qualify under this provision may be admitted with two conditions.

Certificates are accepted from schools in New England on the basis of well established standards which prevail in that region.

A certificate from a school which lies outside New England will be interpreted to mean that the student is prepared to undertake college courses for which the certified subjects are prerequisite. A school will be judged in respect to continued certification privilege on the basis of the college records of the candidates in the certified subjects.

Entrance Examinations. Applicants who cannot present the necessary number of certified units should arrange in consultation with the Dean of the college to take examinations which are given by the

College Entrance Examination Board. The college will determine in each case what constitutes a satisfactory record in such examinations.

Conditions. Conditions may be in specified subjects which were passed but with less than certificate grade, or may be general, in the latter case indicating some subject deficiency in the candidate's preparation as a whole.

Applicants who are accepted with conditions have an opportunity to free themselves from these conditions before enrolling by satisfactory records in College Board examinations.

Conditions are removed if, at the end of the freshman year, the student has met the scholarship requirements for regular standing, namely, no failures and grades above D+ in three-fourths of the normal credit for the year.

A last chance to remove conditions is offered by College Board examinations after the end of the freshman year and before the beginning of the sophomore year.

Each condition not removed before the beginning of the sophomore year is replaced by an additional requirement for graduation amounting to one-half course.

ADMISSION WITH ADVANCED STANDING

A student who wishes to enter the college after attending another institution of college grade is required to submit a letter of honorable dismissal, a complete transcript of his record at the institution last attended, and such other information as the Committee on Admissions may request. If he is admitted he will be provisionally classified as a freshman, sophomore, junior, or senior and will be permitted to register for a program corresponding to this classification. He will not be given a final class rating until he has been in residence for at least one semester.

After a semester in residence he will be given conditional credit for the work done elsewhere to an amount determined by vote of the College Board, on the recommendation of the Recorder and the departments concerned.

A graduate of the three year course of the Worcester Art Museum School may be admitted as a candidate for the bachelor's degree with the rank of *junior* in the college. To graduate from Clark, such a student must meet all the usual admission requirements and all the normal course requirements of the college.

The bachelor's degree will not be conferred upon a student until he has spent at least a year in residence at Clark University, and usually not unless the period of residence includes the two semesters immediately preceding the granting of the degree.

THE ACCELERATED PROGRAM

The twelve-week accelerated program offered from 1942 through 1949 has been discontinued. It will be replaced in the summer of 1950 by a term slightly longer than six weeks, yielding a maximum of one course credit.

FACULTY ADVISERS

When a student is admitted to the college he is assigned to a member of the faculty who will act as his adviser. The adviser will assist the student in making up his program of studies for registration and will be ready at all times to afford him help and counsel.

FRESHMAN INDUCTION PERIOD

The freshman class of the men's college assembles for an induction period a few days before the beginning of the academic year in September. This period is usually spent at a camp in the vicinity of Worcester and is used to complete certain important preliminaries before the beginning of class work.

A fee of $5 is charged for the induction period.

REGISTRATION

Each student is required to register for a program of studies at or before the beginning of each semester. Due notice of registration periods is given. Failure to register before the end of the periods designated involves a charge of $1 for each day's delay up to a maximum of $5.

Changes in registration may be made, on forms supplied by the Recorder, within a reasonable time after the beginning of the semester.

Freshmen may register for programs of either five or six courses in the first semester. In subsequent semesters programs of six courses are restricted to students whose average grade in all courses for the preceding term has been C+ or better, except in the cases of seniors. A senior whose graduation depends upon the completion of a program of six courses may register for such a program if his average grade for the preceding term has been C– or better.

The designation of a *major subject* is required as part of registration at the beginning of a student's second year in college. This election when once recorded may be changed only with the approval of the Dean. Although the *major subject* is not officially recorded until the student's second year in college, he should plan his program from the beginning with his probable choice in mind.

STUDENT PROGRAM

The curriculum permits considerable freedom of adjustment to individual differences of interest. Each student's program of studies includes a group of courses constituting a *major,* also courses in English, in foreign language, in fine arts or music, and in other courses chosen under regulations intended to insure a reasonable distribution of work among the various departments. A large part of each program is made up of courses chosen without restriction.

For statements regarding courses which may be combined to form a *major,* the announcements of the different departments should be consulted. A number of interdepartmental majors are described in the catalog on pages 87-90.

A regular student normally carries a program of five courses throughout the academic year, September to June, in addition to required work in physical training. In general it is expected that a course meeting three times weekly will require a minimum of two hours of preparation for each lecture or recitation. Laboratory periods are usually three hours in length.

A student carrying the regular program should, therefore, expect his college work to require from forty-five to fifty hours of his time per week, in addition to the work in physical training.

Regular attendance at a weekly assembly is required of all undergraduates not classified as part-time or special students.

Instruction is offered in four groups of subjects.

GROUP A (Science and Mathematics). Biology, botany, chemistry, experimental psychology, geology, mathematics, physics, and physiology.

GROUP B (Social Sciences). Economics, education, geography, government, history, international relations, philosophy, psychology, and sociology.

GROUP C (Language and Literature). Greek, Latin, English, French, German, Russian, Spanish, and an interdepartmental course in language and literature.

GROUP D Fine Arts.

The Freshman Program. A first-year student must make up his program entirely from courses designated as "Open to Freshmen."

A candidate for the degree of Bachelor of Arts must include the following courses in his program for the freshman year:

1. English 11.
2. A course in foreign language.
3. A course in group A.
4. A course in group B, not including Philosophy 11a, 11b.
5. An elective. (This course must be Mathematics 11 for students intending to major in group A, including pre-dental and pre-medical students.)

Candidates for the degree of Bachelor of Business Administration will follow the program outlined under the announcement of the Division of Business Administration.

Any first-year requirements which have not been completed must be included in the program of courses for the second year.

The Program for Undergraduates Other Than Freshmen. Undergraduates other than freshmen may enter any course listed under the heading "primarily for undergraduates" for which, in the judgment of the instructor in charge, they are prepared. Seniors and juniors who have completed the published prerequisites are admitted, at the discretion of the instructor in charge, to courses listed under the heading, "for advanced undergraduates and graduate students." Undergraduates are not admitted to courses primarily for graduate students except in rare cases, and then only after a special vote of the College Board and the approval of the secretary of the Graduate Board.

Regular physical exercise is required of all students, with the exception of veterans, for the general promotion of their health and mental efficiency. Physical training is scheduled at times which avoid conflict with recitation hours. *Students are usually excused from this requirement only on the recommendation of the medical director.*

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS

All college regulations involving a quantitative statement of credit are expressed in terms of courses.

A course as a unit of credit normally implies three or four class meetings or laboratory exercises per week throughout two semesters and constitutes one-fifth of a student's normal program. Where departments offer fractional courses, these will be combined in reckoning a student's total credit in courses. Students admitted to classes primarily for graduate students receive credit of one-half course per semester irrespective of the number of class meetings.

A student in good standing in the college will be recommended for the degree of Bachelor of Arts whenever he completes all of the following requirements, unless in the judgment of the College Board there is cause for withholding this recommendation:

1. *Residence.* Not less than three academic years of college study in residence. At least one full year and usually the last year before the degree is conferred must be spent at Clark University. A year in residence signifies the satisfactory completion of five year courses at Clark University.
2. *Course requirements.* Twenty courses in addition to required physical training, *except in the case of veterans who are eligible for benefits under Public Laws 16 or 346 as amended by Public*

Law 268. Such veterans will normally be graduated on the completion of nineteen courses, credit for the twentieth course being granted for military service and miscellaneous training in service.

A satisfactory scholarship record must be maintained throughout the entire program.

3. *Physical training.* Three years of physical training, two hours per week. Veterans who have completed the basic training for any branch of military service and those who served in the Merchant Marine are excused from the requirement in physical training.
4. *Assembly.* Attendance at a weekly assembly is required.

   Requirements 3 and 4 are in addition to the course requirements as stated above.
5. A *major,* i.e. seven courses, approved by the student's major department. Except in the case of interdepartmental majors, four or five of these courses must be in a single department, the remaining two or three must be in fields related to this department.

   Of the fourteen semester grades recorded in a student's major, at least eleven must be C or better.

   The following interdepartmental majors are offered:

   International Relations
   English History and Literature
   American Civilization
      a. American Arts & Letters
      b. Problems of American Society

   Information concerning the requirements in interdepartmental majors may be received from the instructor in charge of each.

   Mathematics is a requirement in the freshman year for a student who intends to major in group A, including pre-dental and pre-medical students. This course may, with the approval of the major department, be included in the seven courses constituting the major.

   Students majoring in Group C who have not offered at least two units of Greek or Latin for admission are required to take a year's course in either classical civilization or elementary Greek or Latin. A choice between civilization and language is subject to the approval of the major department. If the language course is elected, this requirement should normally be satisfied during the freshman year. The course satisfying this requirement may, with the approval of the major department, be included in the seven courses constituting the major.

6. *English.* (a) English 11, or its equivalent; a requirement in the freshman year for all candidates for the degree of Bachelor of Arts.

   (b) An additional half course in English literature, composition or public speaking.

   (c) Satisfactory proficiency in the use of English.
7. *Fine Arts.* A half course chosen from the following list: Fine Arts 11, 12b, 13b, 191a, 192a; Music 12, 13, 15; French 113; German 141; Greek 123a; Latin 123b.
8. *Foreign language.* (a) One course in foreign language, required in the freshman year.

   (b) One course in a foreign language at or beyond the level of third-year college courses in that language. This requirement may be met by the course required in the freshman year.
9. *Group A.* Two courses—either two courses in a single field of study, or one course in each of two fields. These courses may not be distributed between more than two fields of study. One of them *must* be a laboratory course.

   Courses in the history of the sciences are not counted toward the fulfillment of this requirement.
10. *Group B.* Two courses—either two courses in a single field of study, or one course in each of two fields. These courses may not be distributed between more than two fields of study.

GRADING AND SCHOLARSHIP

At the end of each term a final grade—in terms of A, excellent; B, good; C, average; D, poor; F, failure—is reported for each course. The modifying symbols plus (+) and minus (–) are used to indicate variations within each general classification. A report of incomplete is permitted only when severe sickness or some equally unavoidable circumstance prevents the completion of a course. Failures may not be made up, except by repeating the course.

Courses with grades of D+, D or D– may not be counted toward a bachelor's degree beyond one-quarter of the total credit required; i.e., not more than five (5) such courses, or their equivalent in fractional courses, may be counted. If grades are not given in some of the twenty courses required for the degree, the maximum credit which may be counted with grades of D+, D or D– is reduced to one-quarter of the total credit from courses in which grades are given.

CLASSIFICATION OF STUDENTS

A student continues to be ranked within the class in which he enters until the end of the third or junior year, at which time he will be classified as a senior only when he has credit of at least twenty-eight passing semester grades of which at least eighteen semester grades are C– or better. The Dean is empowered to classify transfer and special students when necessary.

COMPREHENSIVE EXAMINATIONS

The faculty has voted to set up a program of Comprehensive Examinations for the A.B. and the B.B.A. degrees. These examinations, which will come in the spring of the senior year, will test the student's knowledge of his major subject as a whole. They will not duplicate the individual course examinations which he has already taken but will be designed to determine whether he has integrated his courses and has acquired a mature understanding of his subject.

The Comprehensive Examinations will be given for the first time in the spring of 1953. They will consist of at least four hours of written work plus a possible oral or laboratory examination. Students who do not pass the Comprehensive Examinations will be entitled to one re-examination during the following academic year, but no student will be given a third examination except by express permission of the College Board. The Comprehensive Examinations will very likely be required in most majors though the decision to give Comprehensives will be left to each department; as soon as possible, students will be informed which departments will demand the passing of Comprehensive Examinations for graduation.

GENERAL HONORS

First honors and *second honors* are awarded annually to members of each class who have, in the judgment of the College Board, distinguished themselves by their scholarship during the year.

The bachelor's degree is awarded *with honor, with high honor,* and *with highest honor* to members of each graduating class whose records, in the judgment of the College Board, warrant this distinction.

DEPARTMENTAL HONORS

An honors program, leading to the degree of Bachelor of Arts *with honors in a particular department,* may be undertaken by a member of the junior class if his cumulative scholarship average places him among the highest third of his class. This plan permits an able student in coöperation with his honors' adviser, to organize the work of his junior and senior years into a unified program which may include a certain number of honors courses. In these he works with a considerable measure of independence under the supervision of his honors adviser. A maximum of two honors courses may be included in the program of any candidate for departmental honors.

Application for honors work should normally be made in writing to the major department not later than the first day of May of the sophomore year.

Admission to candidacy for departmental honors does not relieve a student from any of the standing regulations of the college except as specifically stated above. If a student's candidacy for honors is terminated for any reason, the amount of credit, if any, to be allowed for special honors courses will be determined by the College Board in consultation with the major department.

An honors student must withdraw from his candidacy at the end of any semester in which he has not maintained a non-cumulative standing in the upper half of his class.

SCHOLARSHIP SOCIETY

The Clark Scholarship Society was organized in 1914. Its object is, "to maintain a high and broad conception of scholarship; to encourage devotion to scholarship, so conceived; to promote a close relation for mutual benefit between the undergraduate members and the faculty members of the society." Membership in the society is open to members of the faculty. Student members are elected at the end of the junior year. The selection is made from students with highest standing in the junior class. Nominations are made by the College Board and the undergraduate members of the society elect from the students so nominated. Additional nominations may be made at the middle and end of the senior year.

ABSENCES

Regulations applying to absences from scheduled class meetings and laboratory exercises are based upon the conviction that such absences, regardless of their cause, involve a loss to the student and a drag upon the class. Students are, accordingly, expected to be consistently regular in attendance. Subject to this general provision, students are given a considerable degree of freedom in the control of their attendance. It is expected that such fredom will not be abused, and that it will contribute to the growth of each student's sense of responsibility.

Detailed regulations in harmony with the foregoing principles are posted on the official bulletin board for the guidance of students. They are also published in the Students' Handbook, issued annually. Students are expected to familiarize themselves with these regulations.

Special regulations apply to attendance at the weekly assemblies and physical training.

EXTRACURRICULAR ACTIVITIES AND STUDENT LIFE

Student life at Clark is, as would be expected at a small institution, friendly and informal. Fixed rules and regulations are few, the assumption being that students will conform to the recognized standards of morality, good order, and gentlemanly conduct. College activities are, however, under sufficient faculty oversight to insure responsibility in business dealings and consideration of the welfare of the individual student and of the college community.

The Activities Fee. Athletics and several non-athletic activities are partially supported by an activities fee. This fee admits a student, without additional charge, to all athletic contests held on the college grounds, provides him with the college newspaper, and admits him to plays and concerts presented by the dramatic and musical clubs.

Activities. Students in Clark College have the opportunity to participate in intercollegiate soccer, baseball, tennis, basketball, fencing and crew. A competent coach has immediate supervision over the athletic teams. General supervision of the athletics program is vested in the Committee on Athletics, consisting of the Director of Physical Education, the faculty Committee on Athletics, and the Athletic Council.

In addition to intercollegiate athletics, a steadily increasing intramural program gives opportunity for widespread participation in games and contests of various sorts.

Opportunities for recreation, outside of athletics, are found in dramatic clubs and musical clubs, under expert direction; in editing and publishing the college newspaper (*The Scarlet*) and the senior yearbook (*The Pasticcio*); also in such organizations as the Debating Club and International Relations Club. Gryphon, the senior honorary society, plays an important part in campus life. Non-athletic activities are under the supervision of faculty advisers.

Formal proms, informal Bohemes and fraternity activities furnish further opportunities for social life. One of the University buildings houses the Student Union. For many students, the most prized opportunity for social contacts is in the offices and laboratories, where members of the faculty may be visited with ease and freedom.

Eligibility for Competitive Activities. Participation in organized extracurricular competitive activities is denied only when a student's scholastic record indicates that continuance in an activity might be responsible for scholastic failure. A student is eligible if he is enrolled in a regular program of five courses and if at the end of any half term he has (a) passed in all courses and been graded at least C– in one of them, or (b) passed in all but one course and been graded at least C– in two of them.

Any student carrying less than a full program of studies is ineligible unless his reduced program permits graduation at the end of the year in which that program is carried.

Ineligibility becomes effective the eleventh day after the beginning of a half semester and continues through the tenth day of the succeeding half semester.

Students admitted with advanced standing from another college are ineligible during the first half semester of residence at Clark College.

A special student is normally not entitled to participate in competitive activities of the college. The College Board may, however, permit such participation in the case of a special student who is enrolled for a full program (five courses).

Eligibility for Non-competitive Activities. All students may participate so long as their scholarship proves satisfactory. Details are published in the Students' Handbook.

The Women's College of Clark University

ADVISORY BOARD FOR THE WOMEN'S COLLEGE

Mrs. Philip M. Morgan,
Chairman
Mrs. Clarence S. Arms,
Vice Chairman
Mrs. Robert W. Stoddard
Mrs. Reginald Washburn
Mrs. Thomas F. Power
Mrs. Aldus C. Higgins
Miss Mary N. Allen
Mrs. John D. Peabody
Mrs. William F. Holland
Mrs. Dorothy S. Mayher
Mrs. Robert H. Goddard
Miss M. Hazel Hughes

FOR THE ALUMNAE

Miss Florence C. McKeon
Miss Elizabeth A. Rourke,
Secretary
Miss Elizabeth S. McManus
Mrs. Richard J. Hayes,
ex officio

FOR THE FACULTY WOMEN'S CLUB

Mrs. John E. Bell
Mrs. Vernon Jones
Mrs. Jesse L. Bullock
Mrs. J. Richard Reid,
ex-officio

The Women's College of Clark University was established in the fall of 1942 for the benefit of young women who wish to attend college in Worcester.

All courses of instruction available for men are open to women. The requirements for admission and for a bachelor of arts degree are identical with those for men, and the same tuition and fees are charged. (See earlier section of this catalogue, where requirements and fees are dealt with in detail.)

Undergraduate women who do not commute from their own homes are expected to live in one of the women's dormitories. If other arrangements are desired, written request from a parent or guardian must be sent to the Dean's office and the Dean's approval must be obtained.

Suitable provision has been made for the comfort and convenience of women students while on the campus. A large room on the first floor of Jonas G. Clark Hall, attractively decorated and comfortably furnished, is used by the women as a lounge and as a center for their activities. They also have gymnasium and luncheon room facilities.

The general supervision of the activities of women students is in the hands of Miss M. Hazel Hughes, Associate Dean for Women The Women's College has an Advisory Board composed of representative Worcester women as well as representatives from the Alumnae and Faculty Women's Club who are interested in the educational program, and who advise the administration on matters of general policy and social affairs.

ATHLETICS

Women students use their own gymnasium for practice but have the use of the university gymnasium for games with outside organizations. All students are given a physical examination at the beginning of each year by the medical director for women who lives in the neighborhood and is readily available for resident students.

Several types of athletics are open to women. In the fall and spring hockey, crew, archery, tennis, and golf are conducted outdoors. Tournaments are held in all sports in the spring and fall and a cup is awarded to the winner of each event. During the winter months although basketball is the principal organized athletic activity, volley ball and badminton are also offered.

There is a physical education program, designed to improve posture and general health. Attendance at classes in physical education is required twice a week for the first two years. Training in a group sport and an individual sport is required during the junior year. Swimming and life saving courses are available through arrangements with the Young Women's Christian Association. These courses are conducted by a member of the Physical Education Staff of the University.

Students receive free tickets to all athletic events.

STUDENT ACTIVITIES

The Women's College and the Men's College have a combined student body. The women students are eligible for all offices and participate a great deal in the planning of student body activities.

Women students have many of their own organizations but also may join many of the organizations of the men's college. They serve on *The Scarlet*—the college newspaper, *The Pasticcio*—the college yearbook, and are eligible for membership in the debating society and glee club. The women students participate in the dramatic productions, both in acting and in assisting with stage settings and costumes. The girls are represented on the "Boheme Committee" which plans the college dances and on the Student Activity Fund Committee.

INDUCTION PERIOD

The freshman class of the women's college and all women transfer students assemble at the college on Wednesday before the opening of the academic year to become acquainted and to complete various important preliminaries before the beginning of class work. If conditions warrant, the induction period is spent at some suitable place in the country, not too far from Worcester.

A fee of $5.00 is charged for the induction period.

ADMISSION AND SCHOLARSHIPS

As stated above, requirements for admission are outlined in detail in an earlier section of this catalogue. In addition to admission to the freshman class, admission to the upper classes by transfer from other colleges is possible.

For scholarship aid to women the Trustees each year make a special grant, varying in amount with the established need.

The Clark University Women's Club and the Clark University Alumnae Association each offer two scholarships. The Swedish National Federation has a scholarship awarded annually to a deserving student of Scandinavian stock from Worcester or vicinity. The Soroptimists Club of Worcester has provided a scholarship for a woman student. Other special awards have been made possible by friends of the college.

Correspondence regarding admission and requests for application blanks should be addressed to:

DEAN OF THE COLLEGE, CLARK UNIVERSITY, 950 MAIN ST.,
WORCESTER (3), MASS.

The Division of Business Administration

ORGANIZATION

ARTHUR F. LUCAS, *Director of the Division*

ADMINISTRATIVE COMMITTEE

PRESIDENT HOWARD B. JEFFERSON, *ex officio*

ARTHUR F. LUCAS, *Chairman*
JOHN E. BELL
SAMUEL J. BRANDENBURG
GEORGE E. HARGEST
HOMER P. LITTLE
RAYMOND E. MURPHY

BUSINESS ADMINISTRATION ADVISORY COMMITTEE

DONALD W. CAMPBELL, *Treasurer,*
State Mutual Insurance Company
F. HAROLD DANIELS, *President,*
Riley Stoker Corporation
C. LANE GOSS, *President,*
Worcester County Institution for Savings
WALLACE T. MONTAGUE, *Vice-President,*
Norton Company
ALBERT PALMER, *Vice-President,*
Crompton & Knowles Loom Works
HIRAM RASELY, *Executive Vice-President,*
Burdett College
JACOB REED, *Senior Partner,*
Reed & Company
WILLIAM SAWYER, III, *President,*
W. H. Sawyer Lumber Company

The Division of Business Administration is an integral part of the undergraduate college of Clark University. Its administration is in the hands of the Administrative Committee.

The program in Business Administration is given coöperatively by the Departments of Economics and Sociology, English, Geography, History and International Relations, Mathematics and Psychology.

THE PROGRAM IN BUSINESS ADMINISTRATION

The Division of Business Administration offers a four-year program of studies designed to prepare young men and women for careers in business. Students electing this program will normally become candidates for the degree of Bachelor of Business Administration and must meet the specific requirements for this degree. Students in the Business Administration program are entitled to all privileges of the University which are open to undergraduates, including the right to elect undergraduate courses in other fields such as social studies, language, fine arts and science.

The business program is designed to provide an opportunity for the student to become acquainted with the basic characteristics of modern industry and commerce, to acquire an understanding of the general principles of business and to receive training in the techniques common to all successful business enterprises. It should assist the student in adapting himself to general business requirements and in relating his specific job to the entirety of business and industrial enterprise as well as in perfecting his skill in particular techniques.

The program consists of carefully selected courses in arts and sciences together with specialized courses of particular interest to students of business. Among the former are basic courses in English composition, mathematics, economics, psychology, and American history and government. Among the latter are courses in accounting, finance, managerial techniques, statistical methods, merchandising, and business law. Training in the analysis of administrative problems is emphasized thoughout the program.

In addition to the program leading to the degree of Bachelor of Business Administration, the College offers a less intensive program in Business Administration for candidates for the degree of Bachelor of Arts. Students taking this program should major in the Department of Economics and Sociology. They must meet all the requirements for the degree of Bachelor of Arts including those in English, fine arts, foreign languages and sciences. First year students should take the normal college program for freshmen and should elect Economics 12 for the Group B requirement. The program for the second year should include Business Administration 117 and Economics 11. In the third and fourth years students should elect at least two basic courses in economics, such as Economics 13, 21, 22 or 26, and at least four courses in business administration. The following are recommended: Business Administration 16, 18, 124, 20, and 127.

Students should note that the following courses may not be counted for credit toward the degree of Bachelor of Arts: Business Administration 13, 14b, 17, 128, 181a, 182b, 23a, 23b, 227, 237.

HONORS PROGRAM IN BUSINESS ADMINISTRATION

An integral part of the business program is the work leading to honors in business administration. In accordance with the rules of the faculty, students in the upper third of their class may become candidates for honors. While pursuing this program they substitute special honors courses for not more than two regular year courses. Honors courses consist primarily of individual work under the personal guidance of a member of the business staff. At the end of the senior year, candidates take a comprehensive examination, which if sustained leads to the granting of honors in business administration.

ADMISSION

Applicants for admission to the freshman class in the Business Administration program are accepted on the same basis as other applicants for admission to the college except that the secondary school units presented for admission may be distributed as follows:

Required subjects	8 units	*Elective subjects*	7 units
English	3 units	(of which as many as 3 units may be in commercial subjects)	
Mathematics (algebra)	1 unit		
Foreign Language (one language)	2 units	Total	15 units
Social studies	2 units		

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF BUSINESS ADMINISTRATION

The Freshman Program

A uniform program is normally required of all freshmen. It includes the following courses:

First Semester		*Second Semester*	
Eng. 11a	Composition	B.A. 14b	Business English
Econ. 12	Industrial and Commercial History	Econ. 12	Industrial and Commercial History
B.A. 117	Principles of Accounting	B.A. 117	Principles of Accounting
B.A. 13a	Business Mathematics	B.A. 13b	Business Mathematics
	An elective		An elective
	Physical Training		Physical Training

Additional Course Requirements

Additional courses required of all candidates for the degree of Bachelor of Business Administration are:

B.A. 16	Business Statistics
B.A. 17a	Public Speaking
B.A. 18	Business Organization and Finance
B.A. 20	Business Law
Econ. 11	Principles of Economics
*Econ. 13	Money and Banking
Govt. 15	Introduction to Government

Areas of Concentration

At the end of the sophomore year, each candidate for the degree of Bachelor of Business Administration must submit to his faculty adviser an integrated program of studies covering the junior and senior years. A proposed program should indicate the student's areas of special interest and the specific courses he intends to elect. Ordinarily no program will be approved that does not include in addition to the required courses named above, at least five courses in Business Administration or closely related subjects. Typical of these integrated programs are the following:

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*Under special conditions Economics 13 may be replaced by certain other courses in economics.

Accounting

- Intermediate Accounting
- Cost Accounting
- Auditing
- Advanced Accounting
- Industrial Management
- Office Management

Finance

- Business Organization and Finance
- Money and Banking
- Public Finance
- Business Cycles
- Statistics

Foreign Trade

- Marketing
- Foreign Trade
- Economic Geography
- Industrial Psychology
- A foreign language

Management

- Intermediate Accounting
- Cost Accounting
- Industrial Relations
- Industrial Management
- Office Management
- Industrial Psychology

Marketing

- Principles of Marketing
- Selling
- Advertising
- Market Research
- Sales Management
- Foreign Trade
- Industrial Psychology

Personnel Management

- Industrial Psychology
- Personnel Management
- Industrial Management
- Office Management
- Labor Problems

GENERAL UNIVERSITY REQUIREMENTS

Candidates for the degree of Bachelor of Business Administration are subject to the same general University and College regulations as apply to candidates for the degree of Bachelor of Arts except as these are modified by the special requirements of the business program.

COURSES IN BUSINESS ADMINISTRATION

Courses in Business Administration will be found listed with descriptions under "Business Administration" in the list of Departments and Courses of Instruction.

PROGRAMS AND COURSES OF INSTRUCTION

BIOLOGY
BUSINESS ADMINISTRATION
CHEMISTRY
CLASSICS
ECONOMICS AND SOCIOLOGY
EDUCATION
ENGLISH
FINE ARTS
FRENCH
GEOGRAPHY
GEOLOGY
GERMAN
HEALTH EDUCATION FOR UNDERGRADUATE WOMEN
HISTORY AND INTERNATIONAL RELATIONS
MATHEMATICS
PHILOSOPHY
PHYSICS
PSYCHOLOGY
SPANISH

Programs and Courses of Instruction

Departments, and in some cases important subdivisions of departments, are listed alphabetically in the following pages.

Departmental announcements precede the lists of courses which are offered by the departments. These announcements contain important general information, as well as departmental regulations concerning graduate work and statements of the requirements for undergraduate majors.

Courses are, in general, arranged in sequence under each heading so as to progress from the more elementary to the more advanced. Each course is described as it has been given during the current academic year unless an accompanying note states otherwise. Notice is given in all cases where a department plans to alter the content of the course, or to omit it. If a course is not currently given but will be offered at a later date this fact is stated.

The unit of instruction for undergraduates is a "course." A course normally meets for classroom or laboratory exercises three or four times weekly throughout the regular academic year (September to May) and constitutes one-fifth of the normal program for an undergraduate.

Each unit of undergraduate instruction as listed below yields credit for one half-course in each semester unless its value as a fractional course or a multiple course is indicated.

Advanced courses, not primarily for undergraduates, are announced with a statement of the number of weekly meetings.

Fractional credit is given for the satisfactory completion of one semester of work in any course unless the course is designated as indivisible. Courses primarily for graduate students yield full half course or full course undergraduate credit irrespective of the number of class meetings.

With the consent of the instructor, a course may be entered at the beginning of either semester.

Courses are classified under three headings as follows:

1. PRIMARILY FOR UNDERGRADUATES, designed by numbers beginning with the figure "1."

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS, designated by numbers beginning with the figure "2."

3. PRIMARILY FOR GRADUATE STUDENTS, designated by numbers beginning with the figure "3."

Interdepartmental Majors

In order to provide opportunities for study in certain fields intrinsically worthwhile culturally or professionally, which afford a somewhat greater breadth of choice than strictly departmental programs, yet possess unity in content and purpose, the faculty has authorized certain interdepartmental majors. It will be noted that eight or more courses may be required for such a major.

I. INTERNATIONAL RELATIONS

Freshman and Sophomore Years

History 10—Europe and the United States since the Renaissance
Economics 11—Principles of Economics
Geography 10—Principles of Geography

Junior and Senior Years

Government 24—International Relations
Government 241—International Law and Organization
Geography 201—Political Geography
Economics 207—International Economics
Economics 205—Economic Theory two courses
Economics 26—Government and Industry
Senior Seminar—Group study of selected problems in contemporary world affairs.
Instructor in charge: Professor Hayden

II. ENGLISH HISTORY AND LITERATURE

Freshman Year

History 10—Europe and the United States since the Renaissance

Sophomore Year

History 12—History of England
English 15a and b—Survey of English Literature, from the beginning to 1832.

Junior and Senior Years

History 221—England Since 1760
English 15c—Survey of English Literature, from 1832 to the present (first semester)
Philosophy 12—History of Philosophy

English 10b—Chaucer English 13b—Shakespeare (or English 147b—Oral Interpretation of Shakespeare) English 14b—Elizabethan Drama English 104a—Seventeenth Century with special emphasis on Milton English 105—English Literature of the Eighteenth Century English 106b—Seventeenth and Eighteenth Century Drama English 113a—British Drama English 117a—English Romantic Poetry English 126a—Modern Drama English 142a—The English Novel	six half-courses

Instructor in charge: Professor Anderson

III. AMERICAN CIVILIZATION

Freshman Year

History 10—Europe and the United States since the Renaissance

Sophomore Year

Government 15—Introduction to Government
Economics 11—Principles of Economics
Sociology 11—Principles of Sociology or History 130a

Junior and Senior Years

History 230—Social and Intellectual History of the United States
English 111—Survey of American Literature

Course	
Sociology 12a—Cultural Anthropology	Two and one-half courses
Philosophy 12—History of Philosophy	
History 232—American Constitutional History	
History 234—American Diplomatic History	
History 235—The U. S. in the Twentieth Century	
Government 25b—American Political Parties	
Sociology 22b—Race and Nationality	
Sociology 25—Social Institutions	
Economics 22—Labor Problems	
Economics 26—Government and Industry	
Economics 15a—Public Finance	
Economics 25b—Problems in Public Finance	
Economics 21b—Business Cycles	
Economics 205—Economic Theory	
Economics 231—Economic History of the United States	

Instructor in charge: Professor Campbell

LANGUAGE AND LITERATURE

The course described below is designed to serve the interests of the general student, rather than the interests of the student whose concentration is in literature or in one of the languages. The literary works chosen for investigation are studied with a view of developing an area of knowledge and experience which educated men and women have in common with the eminent creative artists of our Western civilization, and with a view of understanding basic human problems and humane attitudes that are both constructive and creative.

LL13. LITERATURE AND THE NATURE OF MAN.

Offered by the four departments of Classics, English, German, and Romance Languages as a two semester course in the scholastic year 1949-50. The works to be studied are *Antigone* of Sophocles, Shakespeare's *Hamlet,* Dante's *Inferno,* Hardy's *Tess of the D'Urbervilles,* Goethe's *Faust,* Moliere's *Misanthrope,* Ibsen's *Rosmersholm,* and Dostoievski's *Brothers Karamazov.*

Foreign works are read in translation. Emphasis is placed on informal discussions. The course is, therefore, conducted in not more two sections of approximately fifteen students each. Visiting lecturers will participate.

This course will satisfy the requirement for an English course beyond the freshman level, but not the Fine Arts requirement.

M.W.F. 12.

MESSRS. ANDERSON, BARLOW, KING, MARBLE, WELTI.

DEPARTMENT OF BIOLOGY

PROFESSOR POTTER, ASSOCIATE PROFESSOR NUNNEMACHER
ASSISTANT PROFESSOR BLAIR

The biological laboratories are well equipped for the courses offered and contain special equipment for advanced investigations. Funds are avaliable annually for the purchase and building of apparatus which may be required. The university library contains complete files of the more important periodicals and reference works. The department maintains an herbarium of over 40,000 sheets. Certain assistantships, fellowships and scholarships are available from time to time.

UNDERGRADUATE WORK

Biology 11 presents a comprehensive view which is prerequisite to all other courses in the department, except Biology 19a.

An undergraduate majoring in biology must complete Biology 11 and three advanced courses in biology, Chemistry 11, Physics 11, Mathematics 10 or 11, and at least one additional course in chemistry, physics or geology.

A candidate for honors in biology must also take Biology 11, 12, 14 and 240.

Courses in related fields include all courses in Group A and Psychology 203 and 212.

THE PRE-MEDICAL PROGRAM

Clark University is justly proud of its pre-medical training program. Not only do our better students have little difficulty in entering the best medical schools, but they usually rank in the upper half of their medical school classes and become respected and outstanding physicians.

The student entering upon the pre-medical program must be prepared to compete with other college students of above-average ability; he must be of good health and capable of sustained hard work; he must like and get along well with all kinds of people and he must have a real desire to help the sick and advance the science of medicine. The pre-medical student must be prepared to undertake a program of intensive study which usually takes eight years before the medical degree can be obtained. During this time the large amount of class and laboratory work reduces considerably the opportunities for earning money through outside work.

While the requirements for the Bachelor of Arts degree assure each graduate familiarity with several fields of learning, the pre-medical student should take as many non-science courses as possible to round out his general education, because medical school programs leave no time for courses outside of their technical field. Courses in psychology and human relations will be of particular benefit.

The field of medicine is open equally to men and women.

The following programs are recommended for pre-medical students with a major in biology. Program A places the emphasis on biology; Program B places the emphasis on chemistry.

Program A

First year

English
Foreign Language
Mathematics
General Biology
Group B (one course)

Second year

Biology 12
General Chemistry
Foreign Language
Group B (one course)
½ course in English and ½ course Fine Arts

Third year

Biology 16, 17, 18 (Any two)
Chemistry 12a and 14b
Physics 11
Two electives

Fourth year

Biology (Physiology)
Chemistry 15
Three electives

Program B

First year

English
Foreign Language
Mathematics
General Chemistry
Group B (one course)

Second year

Chemistry 12a and 14b
General Biology
Foreign Language
Mathematics 12
½ course in English and ½ course Fine Arts

Third year

Chemistry 15
Biology 12
Physics 11
Group B (one course)
½ course (elective)

Fourth year

Chemistry 19
Biology (advanced)
Three electives

GRADUATE WORK

Students whose records are approved by the department may be admitted by the Graduate Board for work leading to the degree of Master of Arts.

COURSES IN BIOLOGY

During the academic year 1949-1950 the following courses were given: 11, 12, 13, 14, 18, 204, 220, 221, 240, 260, 300, 320, 340, 341, 342, 350 and 360.

1. PRIMARILY FOR UNDERGRADUATES

11. General Biology. An introduction to the fundamental principles and problems of biology.

Divisible course upon approval by the department.

Open to freshmen.

Through the year. M. W. F., 9; M., 2.

Mr. Potter and Mr. Nunnemacher

12. Comparative Anatomy. A study of the morphology of the vertebrates from a comparative standpoint which traces the evolution of animals from fish to mammals.

Lectures and laboratory work.

Through the year. W. F., 10; Tu. F., 2. Mr. Nunnemacher

13. Seminar in General Biology. Credit is not given for this course. All students in the department are invited to attend and to participate. Staff of the Department

14. Botany. First semester, morphology and taxonomy of the lower plants. Special emphasis is given to the algae and fungi.

Second semester, systematic botany of the higher plants with special emphasis on our local flora. A collection of one hundred plants is required, also a spring field trip of at least three days' duration.

Either semester of the course may be elected separately.

Prerequisite: Biology 11, first semester.

Through the year. M. W. F., 1; Th., 2. Mr. Potter

15. Invertebrate Zoology.

Omitted 1949-1950.

18a. Genetics. An introduction to the principles of genetics.

Half course. First semester. M. W. F., 11. Mr. Potter

19a. Human Anatomy and Physiology. An introductory semester course. Does not require Biology 11 as a prerequisite but requires Biology 11 to be counted towards the Group A requirement. May not be counted toward the fulfillment of the requirement for a major in Biology. Three lectures per week.

Omitted 1949-50. Mr. Nunnemacher

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

201. Advanced Systematic Botany. Through the year. Three laboratory periods and one lecture per week. Either semester may be taken separately. Mr. Potter
Omitted 1948-1949.

202. Economic Botany.
Omitted 1949-50. Mr. Potter

204b. Bacteriology. An introduction to the study of bacteriology.
Half course. Second semester. M. W. F., 11. Mr. Potter
Omitted, 1949-50

205b Advanced Genetics.
Three lectures per week.
Half course. Second semester. Mr. Potter

219b Entomology. Fundamentals of insect life.
Three lectures and one laboratory period per week.
Half course. Second semester. Mr. Potter
Omitted 1949-50.

220a. Histology. A comprehensive course dealing with tissue structure. Emphasis is placed on the study of mammalian tissues. Two lectures and two laboratory periods per week.
Half course. First semester Mr. Nunnemacher

221b. Embryology. A consideration of the fundamentals of embryology. Two lectures and two laboratory periods per week.
Half course. Second semester. Mr. Nunnemacher

223b. Parasitology. An introduction to the parasitic mode of life of the protozoa, helminthes, and arthropoda and their relation to mankind. Mr. Potter and Mr. Nunnemacher
Half course. Second semester.

224b. Neuro-anatomy.
Three lectures per week.
Omitted 1949-50. Mr. Nunnemacher

240. GENERAL PHYSIOLOGY. Open to students who satisfy their instructor as to their preparation. The principal types of functioning characteristic of living organisms are considered in the light of their physiochemical determinants.

Through the year. Tu. Th., 11; and two laboratory periods per week. MR. BLAIR

241. ENDOCRINOLOGY. A study of the ductless glands and their relation to behavior.

Half course. Second semester.

Omitted 1949-50.

242. ADVANCED PHYSIOLOGY. Given through the year. Three lectures per week first semester and three laboratory periods per week second semester. MR. BLAIR

Through the year. Omitted 1949-50.

260. SPECIAL PROBLEMS. Advanced semi-independent study of an approved topic under the direction of a member of the staff.

Hours and credit to be arranged. STAFF OF THE DEPARTMENT

261b. MICROTECHNIQUE. During the first semester emphasis is placed on the preparation of animal tissues for microscopic study. The second semester is concerned with the preparation of botanical sections.

Omitted 1949-50. MR. NUNNEMACHER AND MR. POTTER

3. PRIMARY FOR GRADUATE STUDENTS

300. READINGS AND RESEARCH IN BOTANY.
Credit to be arranged. MR. POTTER
320. READINGS AND RESEARCH IN ZOOLOGY.
Credit to be arranged. MR. NUNNEMACHER

340. READINGS AND RESEARCH IN PHYSIOLOGY.
Credit to be arranged. MR. BLAIR
341a. BIOCHEMISTRY. MR. BLAIR
First semester. Three lectures per week.

342b. Enzymology. Mr. Blair
Second semester. Two lecture and two laboratory periods per week.

350. Advanced Studies in Biology.
Tues. 4-6. Staff of the Department

360. Thesis.
Credit to be arranged. Staff of the Department

COURSES IN BUSINESS ADMINISTRATION

A description of the program in Business Administration and a statement of the requirements for the degree of Bachelor of Business Administration will be found under the general heading "Undergraduate Section" and the special heading "The Division of Business Administration."

The courses in Business Administration and related subjects which follow are grouped under ACCOUNTING, ECONOMICS, ENGLISH AND PUBLIC SPEAKING, GEOGRAPHY, HISTORY AND GOVERNMENT, MANAGEMENT, MARKETING, MATHEMATICS, PSYCHOLOGY, AND STATISTICS.

In 1949-50 the following courses were given: 13, 14, 16, 17, 18, 112, 117, 124, 127, 128, 181, 20, 23, 220, 227.

ACCOUNTING

Business Administration 117. Principles of Accounting. The organization and use of financial records, with emphasis on their interpretation as well as on the techniques of procedure.

Indivisible course.

Required of freshmen in the Business Administration program.

Through the year. Tu. Th., 8; M., 2 and Tu. Th., 9; W., 2.

~~Mr. Hargest and~~ Mr. Zukowski

Business Administration 127. Intermediate Accounting.

A study of generally accepted accounting principles and procedures and their application to asset, liability and proprietorship accounts. The analysis of financial statements, including statements from incomplete date and the statement of application of funds. Emphasis is placed upon problem analysis and solution.

This course may be entered at beginning of the second semester, but credit will not be given until both semesters have been completed.

Indivisible course.

Through the year. Tu. Th. S., 11. MR. HARGEST

BUSINESS ADMINISTRATION 128. COST ACCOUNTING. A study of the basic principles of cost accounting and their application to job order, process, estimated and standard cost procedures. Consideration is given to cost systems, budgets and the managerial control of costs. Emphasis is placed upon problem analysis and solution.

Indivisible course.

Through the year. Tu. Th. S., 8. MR. HARGEST

BUSINESS ADMINISTRATION 227a. AUDITING. After an analysis of the purpose and scope of the several classes of audits, the course deals with (1) professional ethics (2) auditing standards (3) internal control systems (4) audit procedures applicable to asset, liability and proprietorship accounts, and (5) the use of worksheets and the preparation of statements and reports.

Half course. First Semester. T. Th. S., 10. MR. HARGEST

BUSINESS ADMINISTRATION 237. ADVANCED ACCOUNTING. The theory and practice of accounting for branches, mergers, receiverships, estates and trusts, consolidated statements, budgets, municipal accounts and other topics of an advanced nature.

Through the year. MR. HARGEST

Omitted 1949-50.

ECONOMICS

(See also announcement of the Department of Economics and Sociology.)

ECONOMICS 11. PRINCIPLES OF ECONOMICS. Required for the degree of Bachelor of Business Administration.

ECONOMICS 12. INDUSTRIAL AND COMMERCIAL HISTORY. Required of freshmen in the Business Administration program.

Economics 13. Money and Banking. Required for the degree of Bachelor of Business Administration.

Economics 15a. Public Finance.

Economics 21. Business Cycles.

Economics 22. Labor Problems.

Economics 25b. Problems in Public Finance.

Economics 26. Government and Industry.

Economics 206b. Economics of Industry.

Economics 207. International Economics.

ENGLISH AND PUBLIC SPEAKING

English 11. Composition and Literature. The first semester is required of freshmen in the Business Administration program.

Business Administration 14b. Business English. A course in English composition designed to train the student in the preparation of reports, letters, ec., used in business.
Required of freshmen in the Business Administration program.
Half course. Second semester. M. W. F., ~~10.~~ 12 Mr. Moore

Business Administration 17a. Public Speaking. A course in the fundamentals of public speaking including the more common speech situations such as speech of introduction, address of welcome, expository and impromptu speeches; problems in human relations; voice tests, vocabulary drill.
Required for the degree of Bachelor of Business Administration.
Half course. First semester. M. W. F., 11. Mr. Illingworth

Business Administration 17b. Public Speaking. Parliamentary procedure, open forum, panel discussion, committee meetings, reports, extemporaneous speaking.
Prerequisite: Business Administration 17a.
Half course. Second semester. M. W. F., 11. Mr. Illingworth

GEOGRAPHY

(See also announcement of the Department of Geography)

GEOGRAPHY 10. PRINCIPLES OF GEOGRAPHY.

GEOGRAPHY 16. ECONOMIC GEOGRAPHY.

HISTORY AND GOVERNMENT

(See also announcement of the Department of History and International Relations)

GOVERNMENT 15. INTRODUCTION TO GOVERNMENT.
Required for the degree of Bachelor of Business Administration.

HISTORY 10. EUROPE AND THE UNITED STATES SINCE 1500.

MANAGEMENT

BUSINESS ADMINISTRATION 18. BUSINESS ORGANIZATION AND FINANCE. A unified year course in the financial structure of modern industry with emphasis on the nature of the business corporation, its financial practices, types of securities, capital structure, financial reorganization, and the problems of internal financial control.
Indivisible course.
Required for the degree of Bachelor of Business Administration.
Through the year. M. W. F., 9. MR. LUCAS

BUSINESS ADMINISTRATION 112. INTRODUCTION TO PERSONNEL MANAGEMENT. A survey of policies and practices in selection, training, promotion and transfer, wage payment, grievances of employees in industry and group relations in recreation, welfare plans, morale and collective bargaining.
Through the year. M. W., 2-3:15. MR. GILSON

BUSINESS ADMINISTRATION 181b. INDUSTRIAL MANAGEMENT. A study of the techniques of executive control and the measures of managerial efficiency pertaining particularly to production control, standardization of operations, purchasing, inventories, selling and budgeting.
Half course. Second semester. T. Th. S., 10. MR. HARGEST

BUSINESS ADMINISTRATION 182b. OFFICE MANAGEMENT. A survey of the principles of office procedure and management with special emphasis upon office organization and planning, departmental organization, standardization of equipment and methods, office forms, office costs and budget, and correspondence.

Half course. Second semester.

Omitted 1949-50.

BUSINESS ADMINISTRATION 203. MARKET RESEARCH. A study of the types of problems faced by business executives in marketing and the ways in which the methods of scientific business research can be used for their solution.

Half course. Omitted 1949-50. MR. KELLEY

BUSINESS ADMINISTRATION 20. BUSINESS LAW. A study of the legal basis of business and the principles of statutory and common law as they affect business relationships; covering such subjects as contracts, property, sales, negotiable instruments and agency.

Indivisible course.

Required for the degree of Bachelor of Business Administration.

Through the year. M. W. F., 8. MR. BREEN

BUSINESS ADMINISTRATION 220. ANALYSIS OF BUSINESS PROBLEMS. A unified year course in the analysis of specific problems of administration and policy making. The course is designed to integrate the principles covered in more specialized courses in Business Administration in order that the student may acquire an appreciation of the broad business picture, while developing his ability to view business and economic problems from an over-all standpoint.

Indivisible course.

Through the year. T. Th., 2-3:30. MR. KELLEY

MARKETING

BUSINESSS ADMINISTRATION 124. PRINCIPLES OF MARKETING. An analysis of the institutions and processes involved in the distribution of goods and services, including a study of consumer motivation, retailing and wholesaling institutions, and marketing policies and practices. Attention will be given to study and discussion of actual marketing problems.

Indivisible course. Through the year. Tu. Th. S., 10. MR. KELLEY

BUSINESS ADMINISTRATION 23a. ADVERTISING. An introduction to the principles and practices of advertising. The emphasis is on the executive use of advertising as a tool of marketing. Topics studied include the economic functions of advertising, advertising research, media selection, advertising organizations, and testing.

Half course. First semester. Tu. Th. S., 11. MR. KELLEY

BUSINESS ADMINISTRATION 23b. SALESMANSHIP. A study of the basic principles and problems of modern salesmanship; functions of sellers, basic knowledge needed in selling, and specialized sales problems.

Half course. Second semester. Tu. Th. S., 11. MR. KELLEY

BUSINESS ADMINISTRATION 27a. INTERNATIONAL TRADE AND FINANCE. A study of the nature, theoretical basis, methods of financing and government control of the international movement of goods.

Half course. First semester. Omitted 1949-50.

BUSINESS ADMINISTRATION 209. SALES MANAGEMENT. A course designed to give the student experience in analyzing sales problems, arriving at practical solutions, and defending these solutions. Sales administration, operation, control promotion and policies are studied during the course.

Half course. Omitted 1949-50. MR. KELLEY

BUSINESS ADMINISTRATION 183b. INDUSTRIAL RELATIONS. A study of the problem of industrial conflict and peace including the roles of union, management and government in negotiation, contracts and daily relations in collective bargaining.

Half course. Second semester. M. W. F., 12. MR. GILSON

MATHEMATICS AND STATISTICS

BUSINESS ADMINISTRATION 13. BUSINESS MATHEMATICS. An elementary course designed to give the necessary foundation for an understanding of the basic processes involved in business transactions.

Required of freshmen in the Business Administration program.

Through the year. Tu. Th. S., 10 and Tu. Th. S., 11. MR. STONE

BUSINESS ADMINISTRATION 16. BUSINESS STATISTICS. This course is designed to give students knowledge of and experience in the collection and presentation of statistical data and in the handling of the basic tools of statistical analysis, and their application to sampling and tests of significance, to index numbers, time series, and simple multiple, and partial linear correlation and regression, in so far as these techniques are useful in the analysis of problems in economics and business.

Required for the degree of Bachelor of Business Administration. Indivisible course.

Through the year. Tu. Th., 9 and Th. 3-5. MR. GREEN

MATHEMATICS 11. FRESHMAN MATHEMATICS.

MATHEMATICS 17. MATHEMATICAL STATISTICS.

PSYCHOLOGY

(See also announcement of Department of Psychology)

PSYCHOLOGY 11. GENERAL PSYCHOLOGY.

PSYCHOLOGY 190a. INDUSTRIAL PSYCHOLOGY.

DEPARTMENT OF CHEMISTRY

Professor Bullock, Associate Professor Martell, Associate Professor MacGillavry, Assistant Professor Martin, Assistant Professor Stanonis

Courses in chemistry fall into two groups:

First, those primarily for undergraduates. These furnish a foundation for professional work in chemistry or medicine, and are suitable for students desiring some knowledge of the subject as part of their general education.

Second, those primarily for graduate students.

UNDERGRADUATE WORK

Students who intend to become professional chemists or to study for an advanced degree in chemistry should major in chemistry and take at least two years' work in physics.

They are advised to conform as closely as possible to the schedule given below.

First year: Chemistry 11; Mathematics 11; English 11; one course in "group B" and foreign language.

Second year: Chemistry 12a, 13, 14b; Physics 11; Mathematics 12 and a continuation of work in foreign language.

Third year: Chemistry 15, 16a and 19; and electives.

Fourth year: Five courses, chosen from the following: Chemistry 112b, 116, 212b, 214b; Physics 15 and 17; an elective. A choice, with reference to future work, should be made after consultation with the chemistry staff.

Chemistry 19, required of all chemistry majors, is essential for work in physiology. Two years of mathematics are required preparation for Chemistry 19 and for graduate work in chemistry. The same amount of mathematics is required for all who elect chemistry as a "major," and for all who expect to become professional chemists.

For professional work in chemistry, at least one year of graduate study is highly desirable.

Students who intend to enter the field of secondary education should acquaint themselves with the requirements in "education" of state and local licensing boards and prepare to meet these requirements. This may necessitate the omission of certain elective courses scheduled for the third and fourth years.

Students who intend to study medicine but are not chemistry majors should elect courses 11, 12a, and 15 which are required for admission to practically all "class A" medical schools. Courses 13 and 14b are strongly recommended if time allows.

Attention is called to laboratory fees and breakage deposits listed under the general heading "Laboratory Fees and Deposits."

GRADUATE WORK

The Department of Chemistry offers advanced courses in the fundamental principles of physical, organic, inorganic and analytical chemistry, and these are supplemented by specialized courses and research work in physical and organic chemistry. Besides a successful completion of the fundamental courses offered in the graduate school, candidates for both degrees must show facility in conducting a laboratory investigation and a command of the subject which is chosen for the thesis or dissertation.

All graduate students are required to have an adequate reading knowledge of French and German. This requirement applies to candidates for both the master's degree and the doctor's degree.

Students registered for advanced degrees are expected to spend not less than eighteen hours per week in the laboratory. This may include special laboratory work in organic, inorganic, and physical chemistry.

Graduate scholarships and fellowships are available to students in this department. Further information may be obtained from the chairman of the department.

COURSES IN CHEMISTRY

During the academic year 1949-50 the following courses were given: 11, 12, 13, 14b, 15, 16a, 19, 112b, 116, 212b, 215, 31, 33, 35, 36, 315, 321.

In 1950-51 the following courses will be offered: 11, 12a, 13, 14b, 15, 16a, 19, 112b, 116, 212b, 215, 33, 34, 35, 37, 38, 315, 322.

1. PRIMARILY FOR UNDERGRADUATES

11. General Chemistry. Systematic study of the elements and their principal compounds and the fundamental laws and theories of chemistry. Three lectures and three hours of laboratory work per week.

Prerequisite for Chemistry 12, 13 and 14.

Divisible only by consent of instructor.

Through the year. M. W. F., 11; M., 2 or Th. 2. Mr. Bullock

12a. Qualitative Analysis. Chiefly laboratory work, nine hours per week. Occasional lectures and recitations.

Prerequisite: course 11.

Half course. First semester. Tu. F., 2. Mr. Stanonis

13. Chemical Principles and Calculations. A study of the use of chemical principles in working out problems, including the study of gases, solutions, thermochemistry and homogeneous equilibrium.

Prerequisites: Chemistry 11 and 12.

Through the year. M. W. F., 8. Mr. Stanonis

14b. Volumetric Analysis. Required for a major in chemistry. Chiefly laboratory work.

Prerequisite: Chemistry 12a.

Half course. Second semester. Tu. F., 2. Mr. Martin

15. Organic Chemistry. Lectures on the principles of organic chemistry and a laboratory study of the preparation and properties of important organic compounds. Three lectures and three hours of laboratory per week.

Prerequisite: a grade of C–, or better, in Chemistry 11, and Chemistry 12a.

Through the year. M. W. F., 9; Th., 2. Mr. Martin

16a. GRAVIMETRIC ANALYSIS. Required for a major in chemistry. Chiefly laboratory work.

Prerequisite: Chemistry 14b.

Half course. First semester. W. F., 2. MR. MARTIN

19. PHYSICAL CHEMISTRY. Principles of physical chemistry including atomic and molecular structure, gases, liquids, solutions, crystalline solids, chemical thermodynamics, homogeneous and heterogeneous equilibria, electrolytic conductance, electrode potentials, electrolysis and polarization, reaction kinetics, colloids.

Three hours of lectures and four hours of laboratory per week.

Required for a major in chemistry.

Prerequisites: Chemistry 13, 14b, Mathematics 12, Physics 11.

Through the year. Tu. Th., 10; Th. F., 2. MR. MACGILLAVRY

112b. PHYSICO-CHEMICAL METHODS. An advanced laboratory course in physical chemistry.

Open to students who have taken or are taking Chemistry 19.

One lecture and six hours of laboratory work per week.

Half course. Second semester. MR. MACGILLAVRY

116. ADVANCED ORGANIC CHEMISTRY. Electron theory of molecular structure, reaction mechanisms, natural products and other advanced topics in organic chemistry. Laboratory work includes qualitative and quantitative organic analysis, and special problems in synthesis.

Prerequisites: Chemistry 15, 14b, and 16a.

Two lectures and 6 hours of laboratory work per week.

Through the year. M. W., 12; T. F., 2. MR. BULLOCK

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

212b. HISTORY OF CHEMISTRY. Outline of historical development of the science, and the relation of chemistry to other sciences at various periods of development. Lectures, collateral reading, reports and thesis.

Open to graduate students and seniors who take or have taken Chemistry 15 and 19 or equivalent courses.

Half course. Second semester. Hours to be arranged.

~~Omitted 1948-49.~~ MR. BULLOCK

214b. ADVANCED QUANTITAVE ANALYSIS. (including gas analysis). Lectures and laboratory work, nine hours of laboratory work per week.

Half course. Second semester. Tu. Th., 2. MR. BULLOCK
Omitted 1949-50.

215. HONORS COURSE. Primarily for candidates for "honors in chemistry." STAFF OF THE DEPARTMENT

3. PRIMARILY FOR GRADUATE STUDENTS

31. STEREOCHEMISTRY. Lectures on geometrical and optical isomerism. Studies on the preparation and use of optically active compounds.

Three hours throughout the year. MR. STANONIS

321. ADVANCED PHYSICAL CHEMISTRY. Lectures on the properties of real gases, crystalline solids, liquids, solutions of molecular compounds and strong electrolytes, in relation to chemical constitution. Homogeneous and heterogeneous equilibria, reaction kinetics, electrode potentials and processes, electrolytic conductance, surface phenomena—atomic structure.

Three hours, through the year. MR. MACGILLAVRY

322a. ELEMENTARY QUANTUM MECHANICS. Lectures on the principles of quantum and wave mechanics, with applications to electronic theory and interpretation of spectroscopic data.

Three hours. First semester. MR. MARTELL
Omitted 1949-50.

NOTE: Course 322a and course 322b together constitute a full year course.

322b. CHEMICAL THERMODYNAMICS. Lecture on the principles of classical and statistical thermodynamics, with applications to a wide variety of chemical phenomena.

Three hours. Second semester. MR. MARTELL
Omitted 1949-50.

33. ADVANCED ORGANIC CHEMISTRY. Lectures on selected subjects in organic chemistry.

Two hours, through the year. MR. BULLOCK

34. ADVANCED INORGANIC CHEMISTRY. Lectures on selected topics in inorganic chemistry.
Two hours, through the year. MR. MARTIN
Omitted 1949-50.

35. SEMINAR. Staff and graduate students. Reports on research work being carried on in the laboratory and reports and discussions of recently published work in related fields.
Once a week, through the year. W., 4.
STAFF OF THE DEPARTMENT

36. PRINCIPLES OF ANALYTICAL CHEMISTRY. Lectures on the theoretical basis of analytical chemistry.
Two hours, through the year. MR. MARTIN

37a. SURFACE AND COLLOID CHEMISTRY. Lectures on colloidal phenomena and on physical chemical properties and effects of surfaces.
Three hours. First semester. M. W. F., 9. MR. MACGILLAVRY
Omitted 1949-50.

37b. HIGH POLYMERS. Lectures on selected topics of the physical chemistry of high molecular and colloidal materials.
Three hours. Second semester. M. W. F., 9. MR. MACGILLAVRY
Omitted 1949-50.

38. CURRENT TOPICS IN CHEMICAL LITERATURE. Required of all students who have completed a year of graduate work.
Hours to be arranged. THE STAFF
Omitted 1949-50.

315. RESEARCH. THE STAFF

DEPARTMENT OF CLASSICS

Assistant Professor Barlow

The Department of Classics provides undergraduate courses for the acquisition of a reading knowledge of Greek and Latin and for the study of Greek and Latin literary masterpieces in their original form. In addition to the courses requiring knowledge of an ancient language, there are others given entirely in English, which deal with all phases of the Greek and Roman civilizations.

Since it may not be possible to offer courses in elementary Latin and Greek every year, students who desire to elect them should consult the instructor as far in advance as possible.

PRIMARILY FOR UNDERGRADUATES

Greek

11. Elementary. Study of Greek grammar through forms, syntax, vocabulary, and reading; selections from Xenophon's Anabasis.

Indivisible course.

Open to freshmen.

Offered 1950-51. Omitted 1949-50 Mr. Barlow

12. Plato, Apology and Crito; Homer, Iliad. Prerequisite: Greek 11 or equivalent.

Open to freshmen.

Omitted 1949-50. Mr. Barlow

123a. Greek Civilization. Lectures and readings on the history, literature, philosophy, art, religion, and government of Greece, with emphasis on the elements which have contributed most to Western civilization. Given in English.

Greek 123 may be counted in fulfillment of the general requirement in art, music, and literature, but not in fulfillment of the requirement in foreign language.

Open to freshmen.

Half course. First semester. Tu. Th. S., 11. Mr. Barlow

LATIN

11. ELEMENTARY. Introduction to the Latin language through study of forms, syntax, and vocabulary, with emphasis on the Latin element in English words. Reading of selections from Latin prose.

Indivisible course.

Open to freshmen.

Omitted 1949-50. MR. BARLOW

12. CICERO, ORATIONS; VERGIL, AENEID.

Prerequisite: Latin 11 or two years of Latin for admission.

Open to freshmen.

Through the year. M. W. F., 9. MR. BARLOW

13. SELECTIONS FROM HORACE AND CATULLUS; COMEDIES OF PLAUTUS AND TERENCE. The work of the course may begin with easy prose selections, to satisfy the lack of uniformity in preparation in secondary schools.

Prerequisite: Latin 12 or three or four years of Latin for admission.

Open to freshmen.

Through the year. T. Th. S., 10. MR. BARLOW

123b. ROMAN CIVILIZATION. Lectures and readings on the history, literature, philosophy, art, religion, law, and government of ancient Rome, with emphasis on the transmission of Greek civilization, on the developments which have contributed to Western civilization, and on the condition of the Roman Empire during the early years of the development of Christianity. GIVEN IN ENGLISH.

Latin 123 may be counted in fulfillment of the general requirement in art, music, and literature, but not in fulfillment of the requirement in foreign language.

Open to freshmen.

Half course. Second semester. Tu. Th. S., 11. MR. BARLOW

DEPARTMENT OF ECONOMICS AND SOCIOLOGY

Professor Brandenburg, Professor Maxwell, Professor Lucas, Associate Professor Killian, Associate Professor Hargest, Assistant Professor Kelley, Mr. Schaffer, Lecturer Breen, Visiting Lecturer Green, Visiting Lecturer Corliss, Visiting Lecturer Olson

The first aim of the department, in its undergraduate courses, is to give the student a comprehensive grasp of the underlying principles and functions of our economic and social institutions, and to develop habits of systematic and unbiased thought about these institutions. Some of the courses, however, contribute to the student's preparation for a business or professional career (Economics 13, 15a, 22, 26, etc.) and are specifically recommended to students who are candidates for the degree of Bachelor of Business Administration. Conversely, some students majoring in economics may be advised to elect certain courses in Business Administration which are credited toward the degree of Bachelor of Arts (Business Administration 16, 112, 117, 18, 124, 127, 20, 27a, 220).

Economics 11 is a prerequisite to all other courses in economics except Economics 12, and is required of all majors in the department. Similarly Sociology 11 is a prerequisite to other courses in Sociology. Courses taken outside the department in partial fulfillment of the major requirement should be selected, subject to departmental approval, so as to provide a unified program centering about the student's major interest. Majors in economics will ordinarily be required to take Economics 205a, Intermediate Economic Theory.

Candidates for departmental honors will engage in a program of independent study consisting of reading and research designed in part to give them specialized training in the fields of their major interest and in part to supplement formal courses. Ordinarily a student will not begin his independent study until the second semester of the junior year, nor will he undertake the equivalent of more than two courses in this manner.

Courses in sociology will be found listed, with descriptions, immediately after the list of courses in economics.

In making elections, students should bear in mind that some advanced courses are offered only in alternating years.

GRADUATE WORK

Students expecting to enter upon graduate work should have mastered creditably basic courses in economics equivalent to at least four courses, including Economics 11; those whose preparation is inadequate should expect to remove the deficiency before proceeding to study for a higher degree.

A range of courses sufficient for the needs of candidates for the doctorate is offered in cycles of two or three years. Individual work, with instructors and in small intimate seminars, constitutes a goodly part of the graduate student's program. The classification of courses as undergraduate, intermediate, and graduate is necessarily an elastic one. Graduate students electing courses in the undergraduate category will be required to do additional work.

Fellowships, scholarships, assistantships, and other aids are available to a limited number of worthy students.

Attention is directed to closely allied courses offered in geography, history and international relations, and psychology.

Courses in Economics

During the academic year 1949-50 the following courses were given: Economics 11, 12, 13, 15a, 140b, 206b, 21a, 21b, 22, 231, 25b, 26, 28, 205a, 207, 210a, 211b, 39, 311, 338.

Descriptions of courses listed below under the designation "Business Administration" will be found in the announcement of "Courses in Business Administration".

1. PRIMARILY FOR UNDERGRADUATES

11. Principles of Economics. An introduction to the fundamental economic principles, together with a study of the practical application of these principles to the problems of American life.

Indivisible course.

Through the year. M. W. F., 10 and 11.

Mr. Lucas Assisted by Mr. LeClair

12. Industrial and Economic History

First Semester. A study of West European industry and commerce since about 1700, emphasizing developments in Britain, France and Germany.

Second Semester. Industrial and commercial history of the United States. The period prior to 1860 is studied briefly. Chief attention centers on the rise of the country as an industrial and commercial power; problems of transportation, domestic and foreign trade, tariff policy, currency and finance, industrial combinations.

For freshmen and sophomores, others by permission of the instructor.

Through the year. M. W. F., 8; 9.

Mr. Brandenburg, assisted by Mr. Escolas

Business Administration 112. Personnel Management.

Business Administration 117. Accounting.

Business Administration 124. Marketing.

Business Administration 127. Intermediate Accounting.

13. Money and Banking. The principles of money and banking with special reference to their functions in the present economy. The theory of value of money, control of the money market and the problem of money and credit in the world economy are given detailed consideration.

Indivisible course.

Through the year. M. W. F., 10. Mr. Maxwell

140b. CONSUMER ECONOMICS. A study of family budgets, planes of living, and other problems arising in the purchase of the customary goods and services. Emphasis is upon housing, insurance, savings, investments, consumer services supplied by advertisers, private non-commercial agencies, the government, and the cooperative movement.

Half course. Second semester. Tu. Th. S., 9.

Omitted 1949-50.

15a. PUBLIC FINANCE. The principles of governmental expenditures, revenues, and debts, with particular reference to the United States.

Half course. First semester. M. W. F., 9. MR. MAXWELL

BUSINESS ADMINISTRATION 16. STATISTICS.

BUSINESS ADMINISTRATION 18. BUSINESS ORGANIZATION AND FINANCE.

115b. FISCAL DEVELOPMENT OF THE UNITED STATES. This course treats the development of the functions and revenues of the federal government and of the state governments (with brief notice of municipalities). For the recent period most attention is given to federal-state fiscal interrelations in the form of federal grants-in-aid, tax conflicts and shared taxes. Recent proposals for a revision of federal-state fiscal relations both for the purpose of bringing federalism up to date and for implementing a high employment program are considered.

Prerequisite: Economics 11, or concurrent enrollment.

Half course. Second semester. MR. MAXWELL

Omitted 1950-51.

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

BUSINESS ADMINISTRATION 20. BUSINESS LAW.

205a. INTERMEDIATE ECONOMIC THEORY. An analysis of contemporary economic theory, with attention to consumer demand, production, factor demand, prices, market structure, and aggregate economics.

Half course. First Semester. Tu. Th., S., 10. MR. SCHAFFER

206b. Economics of Industry. Analysis of several key American industries—oil, steel, automobile, etc.

Half course. Second semester. Tu. Th. S., 10. Mr. Schaffer

21a. Business Cycles. A study of the economics of depression, full employment and inflation under capitalism. Special emphasis on the work of J. M. Keynes and other contemporaries.

Half course. First semester. Tu. Th. S., 8. Mr. Schaffer

21b. Business Cycles. Analysis of recurrent business fluctuations differentiating the typical business cycle and its phases. Treatment of the history, theories of causation and proposals for control of the business cycle.

Prerequisite: Economics 21a or permission of instructor.

Half course. Second semester. Tu. Th. S., 8. Mr. Schaffer

210a. Economic and Social Reform. A study of the development of economic institutions involved in society's attempt to solve its basic economic problems. General emphasis on free enterprise, planning and contemporary industrial organization oriented towards an improved understanding of the American economy.

Half course. First semester. Tu. Th. S., 11. Mr. Schaffer

211b. Comparative Economic Systems. An analysis of contemporary and recent industrialized economic systems, particularly Great Britain, U.S.S.R., Nazi Germany, Fascist Italy, and Sweden. Followed by a critique of reform movements and policy for the American scene.

Prerequisite: Economics 211a or permission of instructor.

Half course. Second semester. Tu. Th. S., 11. Mr. Schaffer

22. Labor Problems. A study of the development of worker and employer organizations, collective bargaining, industrial disputes and methods of prevention and settlement. The second semester is devoted largely to the study of legislative control of industrial relationships and the Social Security program.

Through the year. M. W. F., 11. Mr. Brandenburg

231. ECONOMIC HISTORY OF THE UNITED STATES. In the first semester, colonial agriculture, industry, commerce and finance are briefly treated, followed by the Revolution and the Constitution, financing the Revolution, economic development to the Civil War, economic background and consequences of the Civil War. In the second semester the main topics are economic developments in agriculture, transportation, population, labor, industry, finance, currency and banking.

Through the year. Tu. Th., 3-4:30.

MR. MAXWELL AND MR. CAMPBELL

25b. PROBLEMS IN PUBLIC FINANCE. This course deals mainly with problems of post-war taxation and fiscal policy. The theory underlying the so-called "full employment" act of 1946 is discussed, along with methods by which it may be implemented. Other questions for examination are reform of the federal corporate income tax and death duties, incentive taxation, federal debt policy, the capital budget, federal budgetary procedure.

Half course. Second semester. M. W. F., 9. MR. MAXWELL

26. GOVERNMENT AND INDUSTRY. An analysis of the proper function of government in controlling economic activity, including theories of control, historical development of control, and such special problems as the regulation of trusts, public utilities, and railroads.

Through the year. M. W., 2-3:30. MR. LUCAS

207. INTERNATIONAL ECONOMICS. An examination of traditional international economic theory, and its more recent developments which take into account underemployment, imperfect competition and dynamic factors. The application of these theories, and of the lessons of history, to problems arising out of post-war institutions and projects, and the future of world trade.

Through the year. Tu. Th., 1:30-3. MR. GREEN

BUSINESS ADMINISTRATION 27a. INTERNATIONAL TRADE AND FINANCE.

27b. PROBLEMS OF INTERNATIONAL TRADE AND FINANCE. An extension of Bus. Adm. 27a to a study of recent and current developments: barriers to movement of international trade, Reciprocal Trade Agreements Act, the recent World Trade Organization; problems involved in the international transfer of funds, control of foreign exchanges, the function of the International Bank for Reconstruction, the International Monetary Fund and other similar topics.
Half course. Second semester.
Omitted 1949-50.

28. RESEARCH IN SELECTED ECONOMIC PROBLEMS. Includes departmental honors work and other individual projects completed for credit.
Hours as arranged. THE STAFF OF THE DEPARTMENT

29a. ECONOMICS OF TRANSPORTATION. A study of the development of the transportation system of the United States; its contemporary structure, importance, and economic aspects; the development of public control. Railway rate making and standards therefor; railway combinations and proposals for consolidation; railway labor problems.
Half course. First semester.
Omitted 1949-50.

3. PRIMARILY FOR GRADUATE STUDENTS

31. INTERNATIONAL ECONOMIC POLICIES.
Omitted 1949-50. MR. BRANDENBURG

39. ECONOMIC THEORY. Analysis of the theories of representative economists. Most attention is given to Smith, Ricardo, Mill, Marshall, Clark, Chamberlin, Keynes.
Through the year. W. F., 2-3:30. MR. MAXWELL AND MR. GREEN

Research courses are offered to meet the needs of the individual students for work not presented in regularly scheduled courses.

311. SEMINAR. STAFF OF THE DEPARTMENT

322. Research in Labor. Mr. Brandenburg

325. Research in Public Finance and Money and Banking. Mr. Maxwell

326. Research in Business Organization and Government Control of Business. Mr. Lucas

327. Research in International Trade and Finance. To be arranged

338. Thesis. Staff of the Department

SOCIOLOGY

An undergraduate major is not offered in sociology alone; a student whose primary interest is in sociology may, however, meet the departmental requirement for a major by completing Economics 11 and three or four courses in sociology together with three or two approved courses in related departments. Geography 27 a and b, History 10 and Psychology 200 are particularly recommended for this purpose.

Courses in Sociology

During the academic year 1949-50 the following courses were given: 11a, 11b, 23b, 25.

1. PRIMARILY FOR UNDERGRADUATES

11a. Principles of Sociology.

First Semester—*Social Organization.*

The study of social structure and of social interaction. Biological, geographical and cultural basis of man and his social life. Tribe, clan, community, society, folkways, mores, class, caste, and race. Mr. Olson

11b. Principles of Sociology.

Second Semester—*Social Disorganization.*

A study of the effects of social and cultural change from primary to secondary group life. The effects of mobility, urbanization and secularization. Problems of the person in society; dependency, sickness, population, divorce, politics, religion, minority groups.

Prerequisite for further work in sociology.

Year course. Tu. Th. S., 11. MR. KILLIAN

12a. INTRODUCTION TO CULTURAL ANTHROPOLOGY.

The evolution and development of man and his culture: Basic concepts; the races of man and their distribution; process of adaptation and adjustment through culture; primitive, historic and modern culture complexes compared; divergence, transmission, and function of culture; origin and growth of civilizations; contemporary pre-literate peoples; relationship of anthropology to the other social sciences.

Half course. First semester. Tu. Th., 2-3:30. MR. KILLIAN
Omitted 1949-50.

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

21a. THE FAMILY AND SOCIETY.

A study of the form and function of the family at different culture levels; the influence of geographic, biological, demographic and cultural forces; secondary groups and the family; rural and urban family.

Half course. First semester. MR. KILLIAN
Omitted 1949-50.

22b. RACE AND NATIONALITY.

The meaning of race; the distribution of ethnic groups; ethnic group characteristics—biological and environmental theories. The meaning of nationality; early types of immigrants in America; the cultural backgrounds of the earlier Americans. American minority groups and problems—the Negro, the Jew and other minority groups. The effects of later immigration; immigration restrictions and the quota system; displaced persons and proposed legislative control measures; prospective future of the American population.

Half course. Second semester. MR. KILLIAN
Omitted 1949-50.

23b. CRIME, DELINQUENCY AND SOCIETY.

Study of the explanations for crime and delinquency; history of punishment; other methods of control. Survey of the English and American criminal law and administration of criminal justice; development of penal and correctional methods including probation, parole, release procedure; the juvenile court. Proposals for youth courts and youth correction authorities. Emphasis on crime as a system of behavior. Proposals for dealing with crime and delinquency.

Half course. Second semester. Tu. Th., 2-3:15. MR. KILLIAN

24b. COMMUNITY ORGANIZATION.

The contemporary American urban and rural community in action. Nature and types of community; its place in history. Organization of communities in rural and urban life. Community studies and surveys. The constellation of community social agencies. The field of social work, recreation and welfare. Community chests and councils. Sociology and community organization.

Half course. Second semester. Tu. Th., 2-3:30. MR. KILLIAN
Omitted 1949-50.

25. SOCIAL INSTITUTIONS.

A study of the institutional complex in the social order—its history and development, its relation to the process of socialization and to mind, the emergence of standards and norms of control; the family—its basic character, systems of belief—primitive magic to contemporary religious faiths; education; property and other legal and political concepts, etc.; the interrelations, interdependence and significance, especially for the Western World, of institutional forms and processes.

Indivisible course.
Prerequisites: Soc. 12a or permission of instructor.
Through the year. Tu. Th. S., 10. MR. KILLIAN AND MR. CORLISS

28. RESEARCH IN SELECTED SOCIOLOGICAL FIELDS.

Includes departmental honors work and other individual projects completed for credit.

See also: Economics 12, 140b, 210a, 22.

3. PRIMARILY FOR GRADUATE STUDENTS

38. Research. Social Theory and selected problems.
See also; Economics 311, 322.

DEPARTMENT OF EDUCATION

Professor Jones, Assistant Professor V. B. Johnson, Assistant Professor Lane, with the cooperation of Associate Professor Warman of the School of Geography.

The Department has as its primary objective the providing of professional study for teachers and prospective teachers in secondary schools. It offers work leading to the degree of Master of Arts in Education and specializes in instruction leading to that degree. Many of the regular courses are scheduled in the late afternoons to meet the needs of both full-time students in Education and in-service teachers.

UNDERGRADUATE WORK

A limited number of courses are open to juniors and seniors in the College who wish an introduction to the field for purposes of general education or pre-professional training. The Department recommends, however, that undergraduate students looking to secondary school teaching as a career concentrate upon the subject-matter fields in which they desire to teach, and reserve for a fifth year the professional work in the theory and practice of education. In keeping with this general plan an undergraduate major in education is not offered.

GRADUATE WORK

The requirements for the degree of Master of Arts in Education cannot be adequately stated in terms of courses to be taken, because the evaluation of the work of each student will be made on the basis of achievement rather than on the basis of courses completed. However, the minimum essentials in terms of course requirements are outlined below.

Course requirements. The student is expected to elect one of the following groups of studies as the field in which he wishes to teach:

(a) Mathematics and natural sciences
(b) History, geography, and economics
(c) Ancient and modern foreign languages
(d) English, alone or in combination with some related subject.

Prior to receiving the degree, the candidate must have completed in undergraduate and graduate study combined not less than five year-courses in one of the above groups, or in a combination of groups approved by the Department of Education. At least two semester-courses in a subject-matter field must be taken as a part of the study in residence for the advanced degree and must be passed with a grade satisfactory for graduate credit. In addition to the above requirement in the subject-matter field, eight semester-courses of graduate work in education will normally be required. The program of courses to meet these requirements must be approved in advance by the Department. Changes in the proportion of education and subject-matter courses may be made by the Department on the basis of the candidate's previous training. Work, additional to the above requirements, either in the subject-matter field or in education, or both, may be required if this seems necessary for the adequate preparation of the candidate.

Thesis. The candidate must present a thesis, or special report. The thesis will be adapted to the vocational needs of the candidate and will not be regarded as an index of his capacity for research. In this respect it may differ somewhat from the thesis required of candidates for the degree of Master of Arts in other fields.

Courses in Education

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

200a. Introduction to Education. A study of the various factors involved in the development of modern education. Although designed primarily as a first course for prospective teachers, it also furnishes an overview of education for the general student.

First semester, M.W.F.; 12. Mr. Johnson

201b. Educational Psychology. A study of psychological principles as they bear upon learning and other problems of education.

Second semester, S., 11-1. Mr. Jones

202a History of Education. A study of the relationship between society and its educational agencies. One of the main purposes of the course is to help prospective teachers assess the strengths and weaknesses of our educational traditions. M.W.F. 8

~~Second semester, W., 2-4.~~ Half course, 1st sem. Mr. Johnson

204a. Guidance in Childhood and Adolescence. A study of the development of attitudes and behavior in children and adolescents, with special attention to guidance and learning in school and home.

First semester, ~~T~~., 4-6. W Mr. ~~Lane~~ Bell

208a. Principles of Education. A survey of the major objectives of education, the special functions of the secondary school, and the principles which underlie the learning and teaching process.

First semester, 1949-50. M.W.F., 12. Mr. Johnson
(For 1950-51 See Education 308a)

208b. Methods in Secondary Education. A study of techniques of classroom management, instructional planning, and methods in secondary school work. The personality of the teacher, the physical conditions under which he works, and routine organization are all related and recognized as part of the problem of classroom teaching.

Second semester. M.W.F., 12. Mr. Johnson
(Omitted 1950-51).

210a. Psychological Approach to Citizenship Development. A survey and evaluation of the experimental evidence in the field of character and citizenship development among children and adolescents.

First semester. S., 11-1. Mr. Jones

214. Tests and Measurements Applied to Psychological and Educational Problems. A study of the measurement of aptitude, achievement, interest and attitude. Theoretical considerations and practical problems will be included.

Through the year. M., 4-6. Mr. Jones

20b. (Same as Geography 20b). GEOGRAPHY IN EDUCATION. A survey of geography in the present-day American schools. The course is designed to meet the needs of those expecting to teach geography.
Second semester. M., 4-6. MR. WARMAN
Additional work for undergraduates for an extra hour of credit. Offered in ~~1950-51~~ 1949-50 and in alternate years.

3. PRIMARILY FOR GRADUATE STUDENTS.

304b. BEHAVIOR PROBLEMS IN SCHOOL CHILDREN. Case study methods applied to the understanding and guidance of problem children. Seminars and clinical demonstrations.
Second semester. W., 4-6; S., 9-11. MR. BELL
(Omitted 1950-51).

308a. ADVANCED PRINCIPLES OF EDUCATION. A survey of the major objectives of education, the special functions of the secondary school, and the principles which underlie the learning and teaching process. Omitted, 1949-50
First semester. F., 4-6. MR. JOHNSON

311. VOCATIONAL GUIDANCE. A survey of the techniques and tools of the vocational counselor, including occupational information, vocational testing, methods of interviewing and counseling, case histories and reports, administration and organization of vocational guidance programs.
Through the year. Th., 4-6. MR. LANE
(Given as 211 in 1949-50).

313. STATISTICAL METHODS. The purpose of this course will be to give an understanding of and practice in the statistical methods most valuable in measurement and research.
Through the year. W., 4-6. MR. JONES

315a. APPRENTICESHIP TEACHING. An informal course consisting of extensive practice teaching in the field or fields in which the student plans to teach. Individual supervision is given by the department and by critic teachers in coöperating schools.
First semester. Time to be arranged.
MR. JONES AND CRITIC TEACHERS

DEPARTMENT OF ENGLISH

Professor Illingworth, Associate Professor Marble, Associate Professor Anderson, Mr. Letendre, Mr. Moore, and Mr. Carter.

English 11 through the year is required of all freshmen for the degree of Bachelor of Arts. The successful completion of the first semester or its equivalent is prerequisite to the second semester.

A major in English consists of seven courses in addition to English 11. Every English major must take all three semesters of English 15 and two and one-half other courses in English, two of which must be courses open only to juniors and seniors. As the three courses in allied fields, each English major must take History 10, a year course in Philosophy, and one other course approved by the department (preferably History 12, French 113, German 141, or Greek 123a and Latin 123b).

The only English courses open to freshmen are English 11 and 142b. For English majors, English 15 is prerequisite to all other English courses except English 11, 16, 111, and 142b. English 17 is designed especially for non-English majors, though English 15, 111, and other courses with the consent of the instructor are open to them.

If at least two units of elementary Latin or elementary Greek have not been accepted for admission to college, the English major must satisfy this requirement as prescribed on pages 66 and 67.

English majors should follow as closely as possible the following program:

First year
  English 11
  Group A
  Group B (History 10)
  Foreign language
  One elective (Fine Arts requirement recommended)

Second year
  English 15a and b
  English 111 (recommended)
  Group A
  Group B
  Foreign language

Third year
- English 15c
- One semester of Shakespeare
- English 18a or 18b (18a recommended)
- One half course in English (from group of courses open only to juniors and seniors)
- Foreign language
- Philosophy (any one course)
- One elective (one of the following recommended: French 113, German 141, History 12, Greek 123a and Latin 123b, Music 12)

Fourth year
- Two half courses in English (one of which must be chosen from group of courses open only to juniors and seniors)
- Four half courses in English (recommended)
- Two electives

An English major planning to do graduate work in English should include in his program English 10a, 13b, 18a, History 12, and at least two English courses beyond the required four.

THE PRENTISS CHENEY HOYT PRIZE IN POETRY

A prize of fifteen dollars is awarded annually by the Department of English for the best poem by an undergraduate. This is the interest on a fund established by the alumni as a memorial to Prentiss Cheney Hoyt, Professor of English at Clark University from 1909 to 1920.

COURSES IN ENGLISH

During the academic year 1949-1950 the following courses were given: 11, 12, 13b, 14b, 15a, b, c, 16, 17, 18a, 104a, 106b, 111, 117a, 126a, 133b, 142b, 145, and for the Division of Business Administration B.A. 14b and 17.

I. COMPOSITION COURSES

11. COMPOSITION AND LITERATURE. The purpose of English 11 is to develop clarity and accuracy in reading and writing. The first semester reviews the principles of rhetoric and offers the student practice in analyzing difficult expository passages. The second se-

mester aims to help the student develop sound critical principles in evaluating fiction, drama, and poetry.

Required of freshmen.

Through the year. M.W.F., 9; 10; 11; 12. Tu. Th. S., 9; 10; 11.

MR. ANDERSON, MR. CARTER, MR. LETENDRE,
MR. MARBLE AND MR. MOORE.

16. ADVANCED COMPOSITION. This course is designed for students who have done above average work in English 11 and who desire further training in writing.

16a is prerequisite to 16b.

Through the year. M.W.F., 10. MR. MOORE

II. LITERATURE COURSES

A. SURVEYS AND OTHER GENERAL COURSES

15. A SURVEY OF ENGLISH LITERATURE. A course in English literature from its beginning to the present time.

This course runs through three semesters as follows:

a.	Beginning to 1660 (first semester)	MR. ANDERSON
b.	1660 to 1832 (second semester)	MR. MOORE
c.	1832 to the present (first semester)	MR. MARBLE

Divisible for non-English majors.

No student may count both English 15 and 17 toward the A.B. degree.

M.W.F., 11.

17. GREAT ENGLISH AND AMERICAN WRITERS. This course is intended primarily for non-English majors who wish to take an English course beyond English 11. Instead of tracing the historical development of English literature as English 15 does, this course will consider in detail about fourteen of the most prominent English and American writers. A divisible course.

17a. Chaucer, Shakespeare, Milton, Wordsworth, Tennyson, Browning, and three modern poets.

17b. Swift, Emerson, Melville, Thackeray, Mark Twain, Hardy, and Shaw.

No student may count both English 15 and 17 toward the A.B. degree.

Tu. Th. S., 10. MR. ANDERSON AND MR. MARBLE
(2nd sem.) (1st sem.)

18a THE BIBLE AS LITERATURE. First semester, Old Testament; (~~second semester, New Testament.~~)

M.W.F., 10. Half course, First sem. MR. ILLINGWORTH

111. A SURVEY OF AMERICAN LITERATURE. A course in American literature from Puritan times to the present.

Indivisible course.

Through the year, Tu. Th. S., 11.

MR. ANDERSON AND MR. LETENDRE

133b. A HISTORY OF LITERARY CRITICISM.

Half course. Second semester. M.W.F., 10. MR. MARBLE

Omitted 1950-51.

140a. THE APPRECIATION OF LITERATURE. An analysis of the principle types of literature.

Half course. First semester. MR. ILLINGWORTH

Omitted, 1949-50. To be omitted in 1950-51.

142a. THE ENGLISH NOVEL. A study of the novel from its beginning to Thomas Hardy.

Half course. First semester. M.W.F., 8. MR. ILLINGWORTH.

Omitted 1949-50.

See A. 142b, p. 130

B. SPECIAL PERIODS OR INDIVIDUAL AUTHORS

10b. CHAUCER. After a study of the text of two or three of the *Canterbury Tales,* the main works of Chaucer are read more rapidly. The student is also introduced to Middle English grammar and is given drill in reading Chaucer aloud.

Half course. Second semester. Tu. Th. S., 11. MR. ANDERSON

Omitted in 1949-50.

13b. SHAKESPEARE. A study of the development of Shakespeare as a dramatist. Twelve plays are studied, with the main emphasis on *Hamlet, Othello, Lear,* and *Macbeth.*
Half course. Second semester. M.W.F., 10 or 11.
MR. ANDERSON ~~OR MR. MARBLE~~

14b. ELIZABETHAN DRAMA.
Half course. Second semester. M.W.F., 9. MR. MARBLE
Omitted 1950-51.

104a. MILTON AND THE SEVENTEENTH CENTURY.
Half course. First semester. M.W.F., 9. MR. CARTER
Omitted 1950-51.

105. EIGHTEENTH CENTURY.
Indivisible course. M.W.F., 9. MR. CARTER
Omitted 1949-50.

106b. SEVENTEENTH AND EIGHTEENTH CENTURY DRAMA.
Half course. Second semester. M.W.F., 11. MR. CARTER
Omitted 1950-51.

110. VICTORIAN PROSE AND POETRY. First semester, poetry; second semester, prose. The first semester may be taken independently.
Through the year. M.W.F., 10. MR. MARBLE
Omitted 1949-50. To be omitted 1950-51.

117a. ENGLISH ROMANTIC POETRY.
Half course. First Semester. M. W. F., 11.
MR. MARBLE ~~OR MR. MOORE~~
Omitted 1950-51.

126a. MODERN BRITISH AND AMERICAN DRAMA.
Half course. First semester. Tu. Th. S., 9. MR. LETENDRE
Omitted 1950-51.

127a. MODERN CONTINENTAL DRAMA. A survey of European drama from Ibsen to the present.
Half course. First semester. Tu. Th. S., 11. MR. LETENDRE
Formerly English 126b.
Omitted, 1949-50

142b. THE MODERN NOVEL. A comparative study of representative twentieth century novels of Russia, Germany, France, Sweden, England, and the United States to show how different cultures have treated this vehicle of literary expression.

Half course. Second semester. M.W.F., 8. MR. ILLINGWORTH

III. PUBLIC SPEAKING AND DRAMATICS

12. PUBLIC SPEAKING. A course in the composition and delivery of the most commonly used speeches, parliamentary procedure, discussion groups, and vocabulary drill.

Indivisible course.
Through the year. M.W.F., 9. MR. ILLINGWORTH

145a. STAGECRAFT. A study of the principles and problems involved in producing plays. Practical experience will be given through laboratory work and public performances.

Half course. First semester. MR. ILLINGWORTH

145b. ACTING. Develops the actor from a close study of his basic requirements. An analysis of the emotions, business, pantomime, and interpretation given in theory and practice.

Half course. Second semester. MR. ILLINGWORTH

146b. ORAL INTERPRETATION OF LITERATURE. A course stressing the imagination and the dramatic instinct as fundamental sources of good oral and pantomimic expression. The intellectual elements of vocal expression are studied with special reference to phrasing, inflection, and emphasis; individual and choral speaking.

Permission of the instructor is a condition for enrolling in this course.

Half course. Second semester. MR. ILLINGWORTH
Omitted 1949-50.

147b. THE ORAL INTERPRETATION OF SHAKESPEARE. The life of Elizabethan England with special emphasis on the theatre of Shakespeare. Recordings of such actors as Paul Robeson, Maurice Evans, John Gielgud, and Orson Welles. The plays to be read will include

SUPPLEMENTARY ANNOUNCEMENT BY THE DEPARTMENT OF FINE ARTS:

In the current issue of the Clark University catalogue there appears a program for the major in Fine Arts. Except for the inclusion of one course in the fundamentals of representation and painting procedure (given at the School of the Worcester Art Museum) this is a major in the history of art. The aforesaid course is included with courses in art history for the insight that is to be derived from some contact with the practical problems of painting.

The above program will continue in effect. But, since it offers little to the college student who has a serious professional interest in art, the faculty has recently approved an alternative program for the major in Fine Arts, to be offered in conjunction with the School of the Worcester Art Museum. This will be a major primarily in the practice of art. It will enable a student, while pursuing his or her regular course, to build up gradually and logically a good technical foundation in painting or design in a total of seven courses to be taken at the Museum School. Upon graduation he or she will have completed the approximate equivalent of two years of art school. Whereupon, should interest and ability indicate such a course, the student's professional training in art may be logically rounded off by a fifth year at the Museum School.

This alternative major program in the practice of art will require a total of nine courses, seven of which will be chosen from the extensive offerings of the Museum School. Each program will be worked out with reference to the student's particular interest within the general field of applied art. Thus courses beyond the elementary level would vary considerably for students interested primarily in the practice of painting, the teaching of art, or commercial design.

The following is a comparison of the course requirements for the major programs in Fine Arts, the one in history of art, and the other in the practice of art.

HISTORY OF ART

FA 11.
FA 111 (Representation I in the
Museum School catalogue).
History 10.
Two courses from: FA 15, 16, 191a, 192a.
One course from: French 113, German 141,
Greek 123a, Latin 123b.
Music 12.

PRACTICE OF ART

FA 11.
History 10.
Seven courses from the offerings of the Museum School, chosen with reference to the student's main professional interest.

The student majoring in Fine Arts under the new program must, of course, meet the regular general requirements for the A.B. degree. This may be done, with some leeway for electives, within the total of thirteen courses which such a student must take at Clark.

The new alternative major in the practice of art does not necessarily replace the present coöperative arrangement with the Museum School which is described on pp. 61-62 of the catalogue.

Hamlet, Cymbeline, Julius Caesar, King Lear, Othello, The Comedy of Errors, Merchant of Venice, Taming of the Shrew, As You Like It, Henry V and *Richard II.*

Half course. Second semester. MR. ILLINGWORTH

Omitted 1949-50.

DEPARTMENT OF FINE ARTS

ASSISTANT PROFESSOR JOHNSON, MR. COWARDIN with the cooperation of PROFESSOR ILLINGWORTH, ASSOCIATE PROFESSOR (AFFILIATE) BARNETT, ASSOCIATE PROFESSOR NICOL, ASSISTANT PROFESSOR BARLOW, ASSISTANT PROFESSOR EDWARDS

A student who intends to major in Fine Arts or who intends to offer courses in the visual arts as a part of a major in another department is expected to take Fine Arts 11 before electing other courses in this field.

A major in Fine Arts will consist of:

1) The basic course, Fine Arts 11, to be completed before the end of the sophomore year.
2) Fine Arts 111.
3) History 10, to be completed before the end of the sophomore year.
4) Two courses chosen from the following:
   Fine Arts 15, 16, 191a, 192a.
5) One course chosen from the following:
   French 113, German 141, Greek 123a, and Latin 123b.
6) Music 12.

During the academic year for 1949-50 the following courses in Fine Arts have been given: 1 (hereafter 11), 12b, 15; and Music 12, 13.

1. PRIMARILY FOR UNDERGRADUATES

FINE ARTS 11. A SURVEY OF ART IN THE WEST. A preliminary consideration of basic aesthetic elements in the visual arts is followed by a study of architecture, sculpture, and painting from the beginnings to the present day. Field trips are required.

Open to freshmen.

Through the year. M.W.F., 9. MR. COWARDIN

Listed as Fine Arts 1 in 1949-50.

FINE ARTS 111. DRAWING AND PAINTING 1. Analysis of elements; color and value theory; studies from still life and models; lectures on composition. Students attend classes of the School of the Worcester Art Museum.

Through the year. M. Tu. Th., 2-5. MR. BARNETT

Ordinarily open only to majors in Fine Arts.

FINE ARTS 12b. A SURVEY OF PAINTING IN THE WEST. The development of pictorial expression from the beginnings to the present. Emphasis is placed upon methods and styles. Field trips are required. Designed primarily for non-majors. May not be counted in addition to Fine Arts 11.

Open to freshmen.

Half course. Second semester. M.W.F., 12. MR. COWARDIN

Omitted 1950-51. Offered 1951-52.

FINE ARTS 13b. A SURVEY OF ARCHITECTURE AND SCULPTURE IN THE WEST. A consideration of fundamental architectural terminology and principles is followed by a study of major works of architecture and sculpture from the beginnings to the present day. Emphasis is placed upon stylistic development. Field trips are required. Designed primarily for non-majors. May not be counted in addition to Fine Arts 11.

Open to freshmen.

Half course. Second semester. M.W.F., 12. MR. COWARDIN

New course. Offered 1950-51.

Omitted 1949-50

FINE ARTS 15. THE ART OF THE RENAISSANCE IN ITALY. The first semester is devoted to a consideration of architecture (Brunelleschi through Palladio), and sculpture (Jacopo della Quercia through Michelangelo); the second semester is concerned with painting (Masaccio through Raphael). Emphasis is placed upon the historical background. Field trips are required. Fine Arts 11 is ordinarily prerequisite.

Through the year. M.W.F., 11. MR. COWARDIN
Omitted 1951-52.

FINE ARTS 16. THE ART OF THE SEVENTEENTH AND EIGHTEENTH CENTURIES. A consideration of the origins of the baroque style, followed by a study of major works of European art of the seventeenth and eighteenth centuries. The principal stylistic trends are stressed. The more important artistic personalities—Bernini, Rubens, Rembrandt, Velasquez, and others, are also treated in detail. Field trips are required. Fine Arts 11 is ordinarily prerequisite.

Through the year. M.W.F., 11. MR. COWARDIN
New course. Offered 1951-52. Omitted, 1949-50

FINE ARTS 191a. THE ART OF THE ANCIENT NEAR EAST AND INDIA. This course is primarily concerned with architecture and sculpture in ancient Mesopotamia, Assyria, Persia, and India. Significant works are examined critically and studied in relation to their historical and religious background. Field trips are required.

Half course. First semester. Tu. Th. S., 9. MR. COWARDIN
New course. Offered 1950-51. Omitted, 1949-50

FINE ARTS 192a. THE ART OF CHINA AND JAPAN. An introduction to the art of the Far East. Sculpture and painting in China from the prehistoric period to the Ming dynasty, and, in Japan, from the Suiko to the Tokugawa period. Architecture will be treated only incidentally. Field trips are required.

Half course, Tu. Th. S., 9. MR. COWARDIN
New course. Offered 1951-52. Omitted, 1949-50

MUSIC 12. A SURVEY COURSE IN FORM AND STYLE. Beginning with the genesis of sonata-form, the course extends to the beginning of the twentieth century. The Vienna classicists, the romantic movement, the rise of impressionism, and the so-called modernists are treated in various types of music heard in concert-hall, opera house, and over the radio.

An indivisible course except that qualified students may be admitted for the second semester with the consent of the instructor.

Elective for sophomores, juniors, and seniors.

Through the year. M.W.F., 11 and 12 (2 sections).

MR. H. E. JOHNSON

MUSIC 13. THE OPERA. A course in the evolution of opera from Peri's *Dafne* to Berg's *Wozzeck*. A large repertory of major scores is studied with such historical and literary backgrounds as may conveniently be applied.

Elective for sophomores, juniors, and seniors.

Through the year. MR. H. E. JOHNSON

MUSIC 14a. THE LIFE AND WORKS OF BEETHOVEN. A formal and stylistic analysis of major works by music's most inspired prophet of the nineteenth century. There is intensive score-reading. The biographical material is widened to include the unique relationship of Beethovens' creative work to the changing times in which he lived. Music 12, or some previous interest in music is prerequisite.

Half course, first semester. Tu. Th. S., 10.

Omitted 1950-51, 1949-50. MR. H. E. JOHNSON

MUSIC 15b. TWENTIETH CENTURY MUSIC. The changing concepts of musical form and style parallel those in the visual arts and are closely related. Beginning most conspicuously with Debussy, the newer idioms are traced in this course to the present day through careful study of works by Ravl, Stravinsky, Hindemith, Copland, Berg, Schönberg, Harris and many others whose scores have significance for their time. Music 12 or some acquaintance with the literature of music is prerequisite.

Elective for sophomores, juniors, and seniors.

Half course. Second semester. Tu. Th. S., 10.

Omitted 1949-50. MR. H. E. JOHNSON

Music 15a. Music to 1750. A course in early music from its primitive stages, through the Middle Ages, and the productive 14th-16th centuries, culminating in the masterworks of Bach and Händel. As in all music courses, emphasis is placed on forms and styles. Music 12 or some acquaintance with the literature of music is prerequisite.

Elective for sophomores, juniors, and seniors.

Half course. First semester. Tu. Th. S., 10. Mr. H. E. Johnson
Omitted 1949-50.

French 113. Introduction to French Civilization. A selective survey of the history, art, and literature of France, from the Middle Ages to the present time, given in coöperation with the Worcester Art Museum.

Through the year. Tu. Th. S., 11. Mr. Nicol

German 141. Germanic Civilization. Mr. Edwards

Greek 123a. Greek Civilization.
Half course. First semester. Tu. Th. S., 11. Mr. Barlow

Latin 123b. Roman Civilization.
Half course. Second semester. Tu. Th. S., 11. Mr. Barlow

English 145a. Stagecraft. Mr. Illingworth
Half course. First semester.

COURSES IN FRENCH

A description of the offerings in French and a list of courses in French will be found in the announcement of the Department of Romance Languages.

COURSES IN GEOGRAPHY

A complete statement of the organization and special requirements in the Graduate School of Geography will be found in an earlier section of the catalog under the heading The Graduate School of Geography.

UNDERGRADUATE PROGRAMS

Undergraduates planning to major in geography or to enter graduate work in geography are urged to consult the geography staff early in their undergraduate courses, to plan suitable programs including essential courses in related fields.

Majors in geography are required to take seven year-courses, or the equivalent, in geography and related fields. At least four, and not more than five of these courses must be in geography.

Geography 10, Principles of Geography, is usually taken in the freshman year (or as early as possible after the major subject is chosen to be geography). One or two of the following courses may be taken during the sophomore year: Geography 12a—INTRODUCTION TO CLIMATOLOGY; Geography 15, CONSERVATION OF NATURAL RESOURCES; Geography 16, ECONOMIC GEOGRAPHY; Geography 191, CARTOGRAPHY. Regional Courses in geography, such as 18, GEOGRAPHY OF NEW ENGLAND, should not be undertaken until the junior or senior years. Juniors of superior standing and seniors may be accepted, by special permission, to take number "2" geography courses, such as 27a HUMAN GEOGRAPHY; 27b, CULTURAL GEOGRAPHY; 201, POLITICAL GEOGRAPHY; 20b, GEOGRAPHY IN EDUCATION (primarily for those expecting to teach); 282a, GEOGRAPHY OF NORTH AMERICA; 283b, GEOGRAPHY OF SOUTH AMERICA; 285a, GEOGRAPHY OF EUROPE.

COURSES IN FIELDS RELATED TO GEOGRAPHY

Students majoring in geography should plan early to take the required courses in other fields in order to possess the prerequisites for admission to advanced related courses in their junior and senior years to parallel the courses in their geography program.

The very nature of geography permits a rather wide selection of related courses. However, courses in history, economics, geology, biology, physics, are usually acceptable.

Geology 12, Biology 11, History 10, or Physics 11 may be taken in the freshman year; Economics 11, Government 15 or History 12 in the sophomore year. More advanced work in the fields mentioned will depend largely upon the individual student's interest and desires.

"HONORS WORK" IN GEOGRAPHY

The Clark University Graduate School of Geography offers opportunity to properly qualified students for advanced training in geography. The staff, composed of specialists in their various fields of geography offer regular courses in instruction and direct advanced students in research work. Hence, a junior or senior pursuing an "honors program" in geography is afforded an opportunity to associate with other students in the Graduate School of Geography. For example, a superior student may undertake 391, ADVANCED CARTOGRAPHY; 314, PHYSIOGRAPHY OF THE WESTERN HEMISPHERE; 34, BIOGEOGRAPHY; 32, CLIMATOLOGY; 36, PROBLEMS OF ECONOMIC GEOGRAPHY; and some graduate regional courses. On rare occasions an undergraduate student has been invited to participate in the Fall Field Camp of the Graduate School.

Independent research projects may be undertaken with the adviser in constant surveillance. This research work may be in the fields of human geography, physiography, geography in education, economic geography, land utilization, and regional geography. Such research work must be completed within the semester in which it is started, or proof advanced that the study warrants more time.

When the Senior Survey is set up all honor students will be required to participate. The staff also conducts an oral examination of at least one hour's length to ascertain the achievement of the honors student.

COURSES IN GEOGRAPHY

1. PRIMARILY FOR UNDERGRADUATES

10. PRINCIPLES OF GEOGRAPHY. An introductory course dealing primarily with the physical phases of geography and the application of the principles of geography to the study of selected regions throughout the world. Juniors and seniors admitted only by special permission.

Through the year. M.W.F., 10. MR. WARMAN

12a. Introduction to Climatology. Elements of meteorology and climatology with practical exercises. Emphasis on most recent theories; explanation of distribution of types of climate.

Prerequisite: Geography 10 or equivalent.

Half course. First semester. Tu. Th. S., 8. Mr. Warman

15. Conservation of Natural Resources. A survey of natural resources including a study of ways and means of insuring wise utilization of essential or strategic resources.

Through the year. M.W.F., 11. ~~Mr. Higbee~~

Omitted 1949-50

16. Economic Geography. A study of the distribution of people and of their economic activities organized on a regional basis, beginning with North America and continuing through the other continents.

Prerequisite: Geography 10 or Economics 11, or equivalent.

Through the year. Tu. Th. S., 9. Mr. Murphy

18. Geography of New England. A field and lecture course with special emphasis, in the first semester, on Worcester and vicinity. In the first semester, class meetings begin October 15, following the field camp. Because of the late beginning, three special week-end field trips of three hours each, with carefully prepared reports of each, are required.

Indivisible course.

Prerequisites: Geography 10 and Geology 12, or equivalent.

Through the year. M.W.F., 9. Mr. Lougee

191. Cartography and Graphics. Preparation of maps, graphs, charts, and block drawings.

Through the year. M., 3-5; W., 12. Mr. Burnham

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

20a. Visual Aids in Geography. A course designed to meet the needs of those expecting to teach or already teaching. Sources of visual aids and the practical use of them will be features.

This class holds its meetings in the late afternoon so that teachers in public and private schools may be able to attend.

Half course. Second semester. M., 4-6. Mr. Warman

Offered 1950-51. Omitted 1951-52.

Omitted, 1949-50

20b. GEOGRAPHY IN EDUCATION. A survey of geography in the present-day American school system, designed to meet the needs of those expecting to teach geography.

This class meets in the late afternoon for the convenience of public and private school teachers.

Half course. Second semester. M., 4-6. MR. WARMAN
Omitted 1950-51. Offered 1951-52.

27a. HUMAN GEOGRAPHY. A study of the influence and effect of location, area, relief, coastline, drainage systems, climate, and other geographic factors, separately, and in their mutual interaction upon the economic, social, and political development of peoples and states.

Juniors of superior standing and seniors may be accepted, by special permission.

Half course. First semester. M.W.F., 11. Mr. Fawcett
(27a and 27b should be taken through the same year).

27b. CULTURAL GEOGRAPHY. A summary of the role that geographic factors have played in the evolution of races and cultures, artifacts and institutions.

Juniors of superior standing and seniors may be accepted, by special permission.

Half course. Second semester. M.W.F., 11. Mr. Fawcett

29. PRESENTATION TECHNIQUES OF GEOGRAPHIC MATERIAL. A methods course for graduate students who plan to teach on secondary, college, and university level. Non-credit course.

Hours to be arranged. MR. VAN VALKENBURG AND MR. WARMAN
Omitted, 1949-50

201. POLITICAL GEOGRAPHY. A study of major political problems of the world as related to geographic factors. Application of principles to international relations of selected regions.

Through the year. Tu. Th. S., 10. MR. VAN VALKENBURG

385a ~~285a~~. GEOGRAPHY OF EUROPE. An intensive study of the continent and detailed study of selected regions.

Half course. First semester M.W.F., 1. MR. VAN VALKENBURG
To be omitted in 1950-51.

285b. Geography of Asia. An intensive survey of the continent region by region.

Half course. First semester, M. W. F., 1. Mr. Van Valkenburg

Omitted, 1949-50

291. Cartography and Graphics.

Through the year. Mr. Burnham

385b - Geog. of Scandinavia Mr. Jonasson

3. PRIMARILY FOR GRADUATE STUDENTS

30. Seminar. Hours to be arranged. The Staff

32. Regional Climatology. A study of the climates of the world by major regional examples.

Two hours, through the year. M.W., 8. Mr. Van Valkenburg

33a. Soils Geography. A review of the development and character of soils, their distribution and economic significance, in the light of their geographical relationships.

Not on staff

Two hours. First Semester. M.W., 9. ~~Mr. Higbee~~

33b. Land Utilization and Planning. An outline of relationships that physical and cultural factors bear to purpose and pattern of land uses, conservation of land resources, and basic elements of land planning. T.Th.S. 1 Mr. Jonasson

Two hours. Second semester. M.W., 9. ~~Mr. Higbee~~

34. Biogeography. Geographical significance of character, function, distribution, and relationships of plant and animal forms and societies in their adjustments to environment.

Two hours. Through the year. M.F., 2. ~~Mr. Higbee~~

Omitted, 1949-50

36. Problems in Economic Geography. An advanced study of economic geography, dealing especially with mining, agriculture, and manufacturing. Emphasis upon research methods and techniques.

Two hours, through the year. M. W., 10. Mr. Murphy

39. Historical Background of Geography. A series of lectures on European and American phases.

Hours to be arranged. The Staff

Omitted 1949-50

300. PH.D. SEMINAR. Hours to be arranged.
MR. VAN VALKENBURG

311b. OCEANOGRAPHY. The study of the Oceans from the standpoint of the great basins, their inherent characteristics and their economic worth. Non-credit course.
Hours to be arranged. Omitted 1949-50

314. REGIONAL PHYSIOGRAPHY OF WESTERN HEMISPHERE. A study of selected areas within the major physiographic regions. Laboratory interpretation of maps and aerial photographs.
Two hours of lecture and two hours in the laboratory weekly.
Through the year. Tu. Th., 9. MR. LOUGEE
Omitted in 1950-51. Offered 1951-52.

315. REGIONAL PHYSIOGRAPHY OF THE EASTERN HEMISPHERE. A study of selected areas within the major physiographic regions. Laboratory interpretation of maps and aerial photographs.
Two hours of lectures and two hours of laboratory weekly.
Through the year. Tu. Th., 9. MR. LOUGEE
Offered in 1950-51. Omitted 1951-52. Omitted, 1949-50

361a. URBAN GEOGRAPHY. The modern city from the viewpoint of geography.
Two hours. ~~Through the year~~. First semester MR. MURPHY

383a. GEOGRAPHY OF MIDDLE AMERICA. Historical background of the republics and islands of the Caribbean; analysis of selected important regions; increasing importance of the Caribbean area in commercial and political relations.
Two hours. First semester. Tu. Th., 2. MR. WARMAN

383b. GEOGRAPHY OF SOUTH AMERICA. Analysis of the major geographic regions of South America; special geographic problems of South American governments.
Two hours. Second semester. Tu. Th., 2. MR. WARMAN

385. GEOGRAPHY OF EURASIA. Intensive survey of the continent and detailed study of selected regions.
Through the year. M. W., 2. MR. VAN VALKENBURG
Omitted 1950-51. Omitted, 1949-50

387b. GEOGRAPHY OF THE PACIFIC AREA. A regional treatment of the human geography of the islands of the Pacific.
Offered in 1949-50 when demand warrants. T.Th. 8.,11 MR. MURPHY

391. CARTOGRAPHIC PRESENTATION OF THE GEOGRAPHICAL LANDSCAPE.
Through the year. F., 2:30 to 4:30. MR. RAISZ

399a. FIELD METHODS AND STUDIES. Required of every graduate student.
First three weeks of every year. THE STAFF

RESEARCH COURSES

200. GEOGRAPHY IN EDUCATION. MR. WARMAN

310. REGIONAL PHYSIOGRAPHY. MR. LOUGEE

320. CLIMATOLOGY. MR. VAN VALKENBURG

330. SOILS GEOGRAPHY. MR. HIGBEE

340. BIOGEOGRAPHY. MR. HIGBEE

350. AGRICULTURAL GEOGRAPHY OR LAND UTILIZATION. MR. HIGBEE

360. ECONOMIC GEOGRAPHY. MR. MURPHY

360b. URBAN GEOGRAPHY. MR. MURPHY

370. HUMAN GEOGRAPHY AND DEMOGRAPHY.

380. REGIONAL GEOGRAPHY. THE STAFF

390. POLITICAL GEOGRAPHY. MR. VAN VALKENBURG

DEPARTMENT OF GEOLOGY

PROFESSOR LITTLE

During the academic year 1948-49 only course 12 was given.

1. PRIMARILY FOR UNDERGRADUATES

12. General Geology. A course dealing with the origin of scenery, the classification and interpretation of rocks, the structure of the earth, the geography of the past, and the evolution of life.

Three recitations and one laboratory period or field trip weekly. Attendance on one out-of-town field trip lasting two to four days is required.

Indivisible course.

Through the year. M. W. F., 8; Th. 2. Mr. Little

121b. Crystallography, Mineralogy, and Blowpipe Analysis. An elementary course on the identification of minerals by their geometrical, physical, and chemical properties. Two class meetings and one laboratory period weekly. General geology is not a prerequisite for this course. Mr. Little

Omitted 1949-50.

122b. Economic Geology. A course dealing primarily with the origin of the deposits of useful minerals with some reference to their more important occurrences throughout the world. Elementary chemistry and geology provide a desirable background for this course. Two class meetings and one laboratory period weekly.

Geology 121 is a prerequisite. Mr. Little

Omitted 1949-50.

DEPARTMENT OF GERMAN

Professor Bosshard, Assistant Professor Edwards, Mr. Welti, Mr. Tourtellot

The Department of German provides undergraduate courses for the acquisition of a reading and speaking knowledge of German and for the study of German literature and Germanic civilization.

German 11, 12, 13 form a regular sequence leading to a reading knowledge.

The language requirement for the Degree of Bachelor of Arts may be fulfilled by German 13 or a literature course with stated prerequisites. The department may, when justified by the exceptional preparation or objectives of a student, permit German 123 to take the place of 13 for the fulfillment of the language requirement.

The seven courses required for a major should include the two literature courses, German 152 and 153, prerequisites to these courses, and one course in another language department. Elective courses should be approved by the department.

Attention to correct pronunciation and writing is given in all language and literature courses. The recording machine and gramophone are used in all classes to assist in the acquisition of correct pronunciation.

The Germanic Society is an organization of students which provides an informal meeting ground for all those within the campus community interested in the German language and culture. It fosters speaking, singing and reading German; it produces a German language play each year and presents a series of monthly evening programs, consisting of Geman films, playlets, group singing and the like. It provides lectures and discussions in German from time to time on various aspects of Germanic civilization and literatures, designed to give the more advanced students an opportunity to increase the scope of their classroom work.

The Department of German has a chapter of the "Delta Phi Alpha" honorary German fraternity. Outstanding students of German may be invited to be members of the fraternity.

Generally the members of the Delta Phi Alpha Fraternity participate and take the lead in the activities of the Germanic Society but may, if there is sufficient interest and need, manage independently some of the activities of the Germanic Society.

COURSES IN GERMAN

During the academic year 1949-50 the following courses were given: 11, 12, 13, 123, 19, 153, 141.

1. PRIMARILY FOR UNDERGRADUATES

11. READING APPROACH TO GERMAN—FOR BEGINNERS. Study of vocabulary, pronunciation, elements of grammar, composition, reading of easy prose.

Indivisible course.

Through the year. M. W. F., 8 and 10; Tu. Th. S., 9.

MR. EDWARDS, MR. WELTI

12. INTERMEDIATE GERMAN (Second Year). Reading, translation, review of grammar essentials, exercises in composition and pronounciation.

Prerequisite: German 11 or two years of high school German.

Indivisible course.

Through the year. M. W. F., 9; Tu. Th. S., 9.

MR. WELTI, MR. TOURTELLOT

13. READINGS IN GERMANIC LITERATURE. (Third Year). Introduces the student to a few of the outstanding works of German literature. Additional readings in the social sciences. Exercises in composition.

Prerequisites: German 12 or its equivalent.

Through the year. Tu. Th. S., 9 and 10.

MR. WELTI, MR. TOURTELLOT

123. CONVERSATIONAL GERMAN. Practice in speaking and writing German. Recommended for those students who plan to major in German or for non-majors who have a real interest in attaining fluency in the language.

Prerequisite: German 12, or its equivalent.

Through the year. M. W. F., 10. MR. WELTI

152. Literature: The Age of Enlightenment and the Classical Period. Lectures, reading reports.

Prerequisite: German 13 or satisfactory record in an achievement test in reading, writing and the oral use of the language.

Through the year. M. W. F., 9. Mr. Edwards

Omitted, 1949-50

153. Literature: The Nineteenth and the Twentieth Centuries. See German 152.

Through the year. M. W. F., 9. Mr. Edwards

~~Omitted 1948-49~~. Offered in (1949-50 and in) alternate years.

19. Seminar for Honors Students. Independent reading of literature to supplement the work done in course. Oral and written reports.

M. W. F. 11 and arranged conferences. Mr. Edwards

141. Germanic Civilization. An illustrated lecture course in English of the literature, history, and the fine arts of the German lands from the Holy Roman Empire to the present day, with special stress laid upon the Reformation, the Age of Enlightenment and the Classical Period. Mr. Edwards

Through the year. M.W.F., 12

COURSES NOT REGULARLY OFFERED

111. Speaking Approach to German. For Beginners.

132. Advanced Grammar and Composition.

142. German Classics in Translation.

161a. Lyric Poetry. A survey of German lyric poetry.

162b. Goethe's Faust. Fragment, First and Second Part.

HEALTH EDUCATION FOR UNDERGRADUATE WOMEN

A required course for students in the Women's College, offered each academic year.

HYGIENE. A study of the basic principles of physiology and anatomy and the principles of healthful living which will aid the student in developing attitudes and habits necessary for happiness and service in personal, family, and community life.

A non-credit course.

First semester. Th., 12-1. MISS HUGHES

DEPARTMENT OF HISTORY AND INTERNATIONAL RELATIONS

PROFESSOR LEE, PROFESSOR JORDAN, ASSISTANT PROFESSOR HAYDEN,
ASSISTANT PROFESSOR CAMPBELL, ASSISTANT PROFESSOR COHEN,
MR. RAEFF

UNDERGRADUATE WORK

In its undergraduate program the department offers basic courses in the fields of American, European, and British history, American and European government, and international relations.

History 10, primarily for freshmen, is open to members of all classes, but must be taken as early as possible by majors in the department. Other courses primarily for undergraduates may be elected by non-majors who have not previously taken History 10; and courses for advanced and graduate students may be taken by non-majors with the permission of the instructor if in his judgment the student has an adequate background for the course. Majors will normally take Economics 11 as well as History 10, before the end of the sophomore year. Further elections in this and related departments are determined by the major's special interests, but are expected to include at least two upper class (2) courses in this department. For inter-departmental programs in which this department cooperates, see pages 87-90.

International Relations

Attention is called to the inter-departmental major in international relations, described on p. 87. The Department's courses in the field are listed under both history and government.

GRADUATE WORK

The distinctive feature of the graduate work is the emphasis laid upon individual instruction and guidance by means of informal conferences between instructor and student, small classes, and seminars. The principal fields of graduate study are American history and politics, modern diplomacy, and the international relations of the United States, Europe, the British Empire, and the Far East.

The program for the degree of Master of Arts is worked out individually with each student. All are required to take the departmental seminar (History 30). For general requirements, see the announcement of the Graduate School.

For the doctorate, a candidate must present six fields of study, two of which are normally written off by approved courses or by written examinations, while four are tested in the preliminary oral examination. The doctoral dissertation is written in one of the six fields, designated as the special field. The final doctoral examination covers both the dissertation and the special field.

Reading courses are offered to meet the wants of individual students who need work which is not presented in regularly scheduled courses. Thesis courses provide guidance for those preparing theses or dissertations. These may be semester courses or year courses.

Attention is called to related work offered in the fields of geography and economics from which minor fields for both the master's and the doctor's degrees may be chosen. Note also the announcement of the Division of International Affairs.

COURSES IN HISTORY, GOVERNMENT, AND INTERNATIONAL RELATIONS

During the academic year 1949-50 the following courses were given: History 10, 11a, 130a, 205, 211, 221, 234, 281, the Honors Conference, 30, 315, 331; Government 15, 24, 240, 251a, 25b, 351.

1. PRIMARILY FOR UNDERGRADUATES

10. EUROPE AND THE UNITED STATES. A survey of European and American history since the Renaissance.

A special fee of $1 is charged for supplies and duplicate library copies of books.

Open to freshmen. See departmental announcement above.

Through the year. Tu. Th. S., 9.

MR. JORDAN, FIRST SEMESTER;
MESSRS. LEE AND CAMPBELL, SECOND SEMESTER.
ASSISTED BY MESSRS. BOSWORTH AND SIMMONS.

11a. MEDIEVAL EUROPE. An introduction to European civilization from the Roman Empire to the Renaissance.

Half course. First semester. 1949-50. Tu. Th. S., 10. MR. LEE

Probably to be offered at 10 M. W. F., 1950-51, and to be followed by a second semester course in the Renaissance and Reformation.

12. HISTORY OF ENGLAND. Dealing primarily with British history since the fifteenth century this course forms a background for the study of American history and English literature.

Through the year. Tu. Th. S., 8. MR. JORDAN

To be offered, 1950-51. Omitted 1949-50

130a. POLITICAL HISTORY OF THE UNITED STATES. A survey of political developments in the United States from the adoption of the Constitution to the New Deal.

Half course. First semester. Tu. Th. S., 11. MR. CAMPBELL

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

Given as year course 1949-50

205a. Introduction to Political Philosophy. A Study of the main trends of Western political thought with reference to their underlying social, political and economic realities.
Half course. First semester. Tu. Th. S., 10. Mr. Jordan
Offered 1949-50 and in alternate years.

205b. Recent Political Thought. The conflicting ideologies of our time in their development since the French Revolution. Marxism, Fascism, and Nazism will be analyzed with especial reference to their challenge to liberal democracy.
Half course. Second semester. Tu. Th. S., 10. Mr. Jordan

211. Europe Since 1830. The development of the major European nations with special emphasis on the period from 1870 to the present.
Through the year. Tu. Th. S., 11. Mr. Lee
Offered 1949-50 and in alternate years.

214b. European International Relations Since 1930. Although the emphasis is placed upon international relations, some attention is paid to internal developments in the more important states in order to make clear the causes and course of the war of 1939-45, and its immediate aftermath.
Half course. Second semester. Mr. Lee
Omitted ~~1950-51~~. 1949-50

22a. Tudor and Stuart England. A survey of the period from 1485 to 1688 with particular attention to the social backgrounds of English literature and to the conditions leading to colonization of America.
Half course. Mr. Jordan
Omitted 1949-50.

221. England Since 1760. A general course, stressing the political, economic and social development of the modern commonwealth.
Through the year. Tu. Th. S., 8. Mr. Jordan
To be omitted 1950-51.

225. HISTORY OF THE BRITISH EMPIRE. In the second semester the course will deal with developments and problems since 1900.

Through the year. Tu. Th. S., 10. MR. JORDAN
Omitted 1949-50. Offered in alternate years.

226b. HISTORY OF BRITISH INDIA.

Half course. Second semester. MR. JORDAN
Omitted 1949-50.

23a. AMERICAN COLONIAL HISTORY TO 1776. This will include the European backgrounds of American history with particular reference to England, and the political, economic, and social development of the colonies.

Half course. First semester. Tu. Th. S., 11. MR. CAMPBELL
Omitted 1949-50.

230. SOCIAL AND INTELLECTUAL HISTORY OF THE UNITED STATES. Beginning with a brief survey of the European background of American ideas and institutions, this course deals with the main currents in American thought and society from colonial times to the present.

Through the year. Tu. Th. S., 10. MR. CAMPBELL
Omitted 1949-50. Offered in alternate years.

231. ECONOMIC HISTORY OF THE UNITED STATES. See Economics 231, Department of Economics and Sociology.

MR. MAXWELL AND MR. CAMPBELL

232a. CONSTITUTIONAL HISTORY OF THE UNITED STATES. Major emphasis is placed on the historical development and the present interpretations of our basic law.

Half course. First semester. Tu. Th. S., 10. MR. CAMPBELL
Omitted 1949-50.

234. AMERICAN DIPLOMATIC HISTORY. The history of the foreign relations of the United States from 1783 to the present.

Through the year. M. W. F., 9. MR. HAYDEN
Omitted 1950-51.

235b. THE UNITED STATES IN THE TWENTIETH CENTURY. A study of the chief influences in American civilization since 1900, with special attention to the emergence of current social and economic problems.

Half course. MR. CAMPBELL

Omitted 1949-50. To be offered in the Summer Term, 1950.

274b. THE MODERN FAR EAST. The course deals primarily with international relations in the region since 1895.

Half course. MR. HAYDEN

Omitted 1949-50.

281. HISTORY OF RUSSIA. From the origins of the Russian state to the present. Special attention is given to the development of Russian society and the ideological preparation of the Revolution.

Through the year. M. W. F., 10. MR. RAEFF

284. THE EASTERN MEDITERRANEAN AND THE ARAB WORLD. A study of the Near and Middle East as an area of increasing importance in the international relations of the great powers in the nineteenth and twentieth centuries.

Through the year. MR. JORDAN AND MR. LEE

Omitted 1949-50.

HONORS CONFERENCE. A course for honors candidates, in which emphasis is put upon student reports and discussion.

Through the year. W., 3-5. THE STAFF

3. PRIMARILY FOR GRADUATE STUDENTS

30. DEPARTMENT SEMINAR. Introduction to bibliography and methods of research, and discussion of research problems being investigated by graduate students and faculty.

Required of all first-year graduate students in the department.

Half course, through the year. W., 4-6. THE STAFF

314. EUROPEAN INTERNATIONAL RELATIONS SINCE 1870. A study of the diplomatic history of Europe from the Franco-Prussian war to the present time.

Through the year. Th., 2-4. MR. LEE

Omitted 1949-50.

315. Topics in European International Relations. The period of 1900-1914 is being studied during the year 1949-50 by means of individual reports.

Through the year. Th., 3-5. Mr. Lee and Mr. Jordan

321a. England in the Twentieth Century. The development of the United Kingdom from the time of its greatest power to its present struggle to maintain a world position.

Half course. First semester. M., 4-6. Mr. Jordan

Omitted 1949-50.

331. Problems of Democracy in the United States, 1880-1920. An analysis of the fundamental factors making for change in American economic and political thought at the turn of the century is followed by an intensive study of the progressive movement.

Through the year. M., 2-4. Mr. Campbell

GRADUATE READING AND THESIS COURSES

31. 310.	Reading Thesis	In the History and International Relations of Europe.	Mr. Lee
32. 320.	Reading Thesis	In the History and International Relations of England and the British Empire.	Mr. Jordan
33. 330.	Reading Thesis	In the History of the United States.	Mr. Campbell
38. 380.	Reading Thesis	In the History of Russia and Slavic Europe.	Mr. Raeff

GOVERNMENT

1. PRIMARILY FOR UNDERGRADUATES

15. Introduction to Government. After a consideration of the origin and theories of the state, the structure and functions of American government are studied, with some attention to the problems of modern administration.

Through the year. M. W. F., 12. Mr. Cohen

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

24. INTERNATIONAL RELATIONS. International rivalries in the 20th century examined, with attention to supposed or genuine national interests. Their worldwide nature is emphasized, and the failure of past efforts to establish order analyzed as a basis for estimating the practicality of modern policies and proposals.

Through the year. M. W. F., 11. MR. HAYDEN

240. SEMINAR IN INTERNATIONAL RELATIONS. Group study of certain problems in contemporary affairs. Required of seniors in the international relations major; not open as an elective except to properly qualified graduate students with the instructor's permission.

Through the year. Tu., 3-5, and conferences. MR. HAYDEN

241. INTERNATIONAL LAW AND ORGANIZATION. A survey of historic doctrines of international law and their application to modern conditions is followed by a study of the various institutions created to handle international economic, social, and political problems, especially those concerned with the pacific settlement of disputes and the establishment of world order.

Through the year. M. W. F., 2. MR. HAYDEN
Omitted 1949-50. Offered in alternate years.

25b. COMPARATIVE GOVERNMENT. The governments and politics of Great Britain and the major European powers.

Half course. Second semester. M. W. F., 10. MR. COHEN

251a. AMERICAN POLITICAL PARTIES. A study of the functioning of American party organizations, pressure groups, and the electorate in American politics. Emphasis is placed upon current problems and trends in the field.

Half course. First semester. M. W. F., 10. MR. COHEN

252b. INTRODUCTION TO PUBLIC ADMINISTRATION. An introductory examination of the role of administration in modern government, including problems of personnel administration, fiscal management, administrative regulation, and government organization.

Half course. Second semester. M. W. F., 10. MR. COHEN
Omitted 1949-50.

3. PRIMARILY FOR GRADUATE STUDENTS

341. International Relations Seminar. A study of contemporary problems by means of student research and reports.
Through the year. Tu., 4. Mr. Hayden and Mr. Green
Omitted 1949-50.

342a. Modern Imperialism. An attempt to determine whether certain people must or should rule over others, in the light of past experience and contemporary realities.
Half course. First semester. Mr. Hayden
Omitted 1949-50.

351. Problems in American Government. A study primarily by means of student research and discussion of selected contemporary problems in American government, including the legislative process, public opinion, and political parties.
Through the year. M., 2-4. Mr. Cohen

GRADUATE READING AND THESIS COURSES

34.	Reading	In International Relations.	Mr. Hayden
340.	Thesis		
35.	Reading	In American and Comparative Government and Politics.	Mr. Cohen
350.	Thesis		

DEPARTMENT OF MATHEMATICS

Professor Bumer, Assistant Professor Stubbe, Mr. Stone,
Mr. Christian

The department of mathematics offers courses leading to an undergraduate major in mathematics, courses necessary for the study of the physical sciences and courses for the student who wishes to learn about the fundamental concepts of mathematics primarily for their cultural value. Some of the courses offered are for advanced undergraduates and graduate students.

Courses 11, 12, 13 and 214 form the basis of a major in mathematics and are important for the study of the physical sciences. A major in mathematics normally includes one or two courses in mathematics in addition to the four courses above and two or three courses in an allied field of study such as physics, chemistry or philosophy.

DESCRIPTION OF COURSES IN MATHEMATICS FOR UNDERGRADUATES

11. FRESHMAN MATHEMATICS. Course 11 has for prerequisites one course in algebra and one course in plane geometry taken in the secondary schools, although at least three courses in secondary school mathematics are advisable. Careful attention is given to fundamental concepts and to the development of useful techniques. Topics in algebra, trigonometry and analytic geometry are introduced.

A qualified student may request permission to take an attainment test in the subject matter of Course 11. If he passes such a test he may enter Course 12.

Through the year, M. W. F., 8 and 11; Tu. Th. S., 8, 9 and 10.

MR. STUBBE, MR. CHRISTIAN, MR. STONE

12. ANALYTIC GEOMETRY AND CALCULUS. Course 12 introduces both the differential and integral calculus and is essential to further work in mathematics as well as to an understanding of many modern reports in the sciences. Topics from analytic geometry are studied as the need for them arises in the development of the calculus.

Prerequisite: Course 11 or its equivalent.

Through the year, M. W. F., 10 and 11.

MR. STUBBE, MR. CHRISTIAN

13. DIFFERENTIAL EQUATIONS. The course in differential equations involves treatment of ordinary differential equations, with emphasis on the principal types of first and second order equations. Applications to geometry, physics, chemistry and mechanics are stressed.

Prerequisite: Course 12.

Through the year, Tu. Th. S., 9. MR. BUMER

15a. Theory of Equations. Algebraic equations and their roots are studied in the course in theory of equations. Polynomial equations are treated by means of exact and approximate methods and systems of linear equations are studied.

Prerequisite: Course 12.

Half course, first semester, M. W. F., 11. Offered 1949-50. Not offered 1950-51. Mr. Christian

17. Mathematical Statistics. Topics discussed in Course 17 include frequency distributions, moments, tests of significance, correlation, theory of large and small sampling, hypothesis testing, and quality control. Although numerous applied problems are worked out in detail by the students, emphasis is placed on the mathematical theory.

Prerequisite: Course 12. Mr. Bumer

Through the year, M. W. F., 10. Offered 1949-50. Not offered 1950-51.

19a. Advanced Analytic Geometry. The course in advanced analytic geometry includes the study of planes and lines, transformation of coordinates and the general equation of the second degree.

Prerequisite: Course 12.

Half course, first semester, M. W. F., 9. Offered 1949-50 as 15b. To be offered 1950-51. Mr. Christian

15b HALF COURSE; SECOND SEMESTER

19b. Projective Geometry. The following topics are studied: homogeneous coordinates, principle of duality, linear transformations, cross ratio, curves and surfaces of the second order and second class.

Prerequisite: Course 19a.

Half course, second semester, M. W. F., 9. New course. Not offered 1949-50. To be offered 1950-51.

110. Fundamental Concepts of Elementary Mathematics. The theory of the decimal and other numerical systems, Euclidean geometry, non-Euclidean geometry, the postulational approach to algebra and the meaning of infinite processes will be among the topics discussed. Course 110 is designed especially for prospective

teachers of secondary school mathematics, but it may be taken by anyone interested in the cultural aspects of mathematics. The course may not be credited toward a major in mathematics. Except in rare instances, enrollment will be limited to juniors and seniors.

Through the year. Tu. Th. S., 11. New course. Not offered 1949-50. To be offered 1950-51.

FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

1949-50 ~~2~~14. Advanced Calculus. In the course in advanced calculus the following topics are among those studied: complex numbers, partial differentiation, infinite series, vector analysis, multiple and line integrals. Emphasis is placed on the uses to which the topics can be put in the sciences and engineering.

Prerequisite: Course 12.

Through the year. Tu. Th. S., 11. Mr. Stubbe

215b. Modern Algebra. Course 215b offers an introduction to modern algebraic systems, such as groups, rings, and fields. The emphasis will be on developing in the student the modern axiomatic point of view. To this end considerable attention will be given to the nature and construction of a formal proof and to the problem of meaning in mathematics.

Prerequisite: Course 12.

1949-50

Half course, second semester. M.W.F., 11. Not offered 1950-51.

1949-50 ~~2~~16a. Introduction to Complex Variables. The course in complex variables affords an introduction to analytic functions, line integrals, conformal mapping. Considerable attention is given to mathematical rigor and many examples are studied to illustrate applications.

Prerequisite or taken concurrently: Course 14.

Half course, first semester. M.W.F., 12. Offered 1949-50. Not offered 1950-51. Mr. Bumer

~~2~~16b. Advanced Differential Equations. Some partial differential equations of mathematical physics, Fourier Series and boundary value problems, systems of ordinary differential equations are studied.

Prerequisite: Course 13.

Half course, second semester. M.W.F., 12. Offered 1949-50. Not offered 1950-51. Mr. Bumer

218. Introduction to Analysis. In course 218 consideration is given to fundamental topics in analysis not found in course 214 which are necessary to the background of students in pure and applied mathematics. Emphasis will be placed on clarity of exposition and precision of statement, which are necessary to the understanding and appreciation of both elementary and advanced mathematics.

Prerequisite: Course 12.

Through the year. M.W.F., 12. New course. Not offered 1949-1950. To be offered 1950-51.

COURSES IN PHILOSOPHY

Courses in philosophy are designed to broaden the student's perspective and help him trace the relations among the various fields of knowledge. They are designed primarily for general education and normally students are not accepted as majors in this field of study.

Philosophy 11a. Logic and Scientific Method. A study of the principles of valid reasoning and inductive methods. The application of these principles and methods to the problems of the natural and social sciences, and the consideration of the relation between logic and problems of value.

Open to freshmen.

Half course, first semester. Tu. Th. S., 11. Mr. Beck

Philosophy 11b. Problems of Philosophy. A study of the nature and method of philosophy. The application of philosophical method to contemporary personal and social problems. A detailed analysis of some typical problems in the various fields of philosophy.

Open to freshmen.

Half course, second semester. Tu. Th. S., 11. Mr. Beck

PHILOSOPHY 12. HISTORY OF PHILOSOPHY. A study of the movements of philosophical thought from the early Greeks to the present day and an analysis of the place of philosophy in the development of Western culture.

Not open to freshmen.

Indivisible course.

Three hours, through the year. Tu. Th. S., 9. MR. JEFFERSON

PHILOSOPHY 13a. PROBLEMS OF ETHICS. A constructive study of important ethical theories. Designed to acquaint the student with the problems and scope of ethics, and to aid him in the formulation of a fruitful ethical hypothesis.

Open to Juniors and Seniors.

Half course, first semester. Tu. Th. S., 10. MR. BECK

PHILOSOPHY 13b. SOCIAL PHILOSOPHY. A critical and comprehensive study of the principles underlying social structure and functions. The examination of the goals, purposes, norms, and ideals of social process, and the relation of that process to the individual good.

Open to Juniors and Seniors.

Half course, second semester. Tu. Th. S., 10. MR. BECK

PHILOSOPHY 14. CONTEMPORARY PHILOSOPHY. An intensive study of important thinkers representative of modern developments in philosophy, together with emphasis on the historical roots of their thought. Subjects for 1949-50; Kierkegaard, Royce, Whitehead, and Dewey.

Prerequisite: One and one half courses in philosophy, including Philosophy 12; or permission from the instructor.

Divisible course, through the year.

Tu. Th., 2. MR. JEFFERSON AND MR. BECK

DEPARTMENT OF PHYSICS

Professor Roope, Assistant Professor Gunter

UNDERGRADUATE WORK

The department offers fundamental courses required in preparation for the study of chemistry, biology, meteorology and allied sciences, medicine, dentistry, engineering and science teaching, as well as courses leading to professional or graduate work in physics.

The requirement for a major in physics consists of Physics 11, two courses from Physics 15, 16, 17, 18, 124, either Physics 22 or 23, Mathematics 11 and 12, and Chemistry 11. In addition to electives in Physics, Mathematics 13 and Chemistry 19 are desirable. Students preparing for graduate work should also obtain a good reading knowledge of French and German while in college.

Physics 11 or its equivalent is the normal prerequisite for all other courses in the department. Courses numbered 15 or higher, except 17 and 124, require the use of calculus and should not be elected without consulting the instructor in charge. Courses 15 and 17 each require a limited amount of laboratory work to be done at the discretion of the instructor and at such times as will not interfere with regularly scheduled courses.

GRADUATE WORK

Courses leading to the degree of Doctor of Philosophy and Master of Arts are omitted for the present.

Courses in Physics

During the academic year 1949-50 the following courses were given: 10, 11, 15, 16, 17, 23.

During the academic year 1950-51 the following courses will be offered: 10, 11, 17, 18a, 18b, 124, 22.

PRIMARILY FOR UNDERGRADUATES

10. College Physics. Classical and modern physics.
Primarily for non-science majors.
Indivisible course.
Open to freshmen.
Through the year. M.W.F., 10; M. Tu. or Th., 2. Mr. Roope

11. General Physics. Mechanics, heat, electricity and magnetism, wave motion, sound, and light.
Indivisible course.
Open to freshmen.
Through the year. Tu. Th. S., 8; M. or Tu. or Th., 2. Mr. Gunter

13. History of Physics. Mr. Roope
Omitted 1949-50

15. Heat and Thermodynamics. This course includes a study of thermometry, calorimetry, the thermal properties of matter in the solid, liquid and gaseous states, the laws of thermodynamics, and applications to a wide range of phenomena.
Prerequisities: Physics 11 and Mathematics 12 (may be taken concurrently).
Through the year. M.W.F., 11. Mr. Roope

16. Optics. The first semester is devoted to a study of the principles of geometrical optics and their application to various optical instruments, including ground and aerial cameras. The second semester is devoted to the principles and application of physical optics.
Prerequisites: Physics 11 and Mathematics 12 (may be taken concurrently).
Through the year. Tu. Th. S., 9. Tu. or Th., 2. Mr. Gunter

17. Introduction to Modern Physics. An elementary treatment of physical experiment and theory of the past fifty years including the more recent atomic and nuclear developments.
Through the year. M.W.F., 9. Mr. Roope

18a. Theoretical Spectroscopy. The origin of line and band spectra in both emission and absorption spectrophotometry is treated.

Prerequisites: Physics 11 and Mathematics 12 (may be taken concurrently). Physics 16 and 17 are desirable but not required.

Half course. First semester. Tu. Th. S., 9. Mr. Gunter
Omitted 1949-50.

18b. Experimental Spectroscopy. The theory and applications of the optical and electrical instruments used in an experimental spectroscopy are discussed. The student will become familiar with the use of prism and grating spectrographs, micro-densitometers, interferometers, and their associated photographic and electrical techniques. The principles of spectrochemical analysis are included in this course.

Prerequisites: Physics, 16 or Physics 18a and Mathematics 12 (may be taken concurrently). Physics 17 is desirable but not required.

Half course. Second semester. Tu. 9; Tu. Th., 2. Mr. Gunter
Omitted 1949-50.

124. Fundamentals of Electronics. This is a first course in electronics designed to give a broad, largely non-mathematical, background for the understanding of electron tubes and their associated circuits. The application of modern electronic devices to the fields of physics, chemistry, biology, meteorology, and navigation is discussed.

Prerequisite: Mathematics 11.

Through the year. Tu. Th. S., 10; Tu. or Th., 2. Mr. Gunter
Omitted 1949-50.

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

22. Theoretical Mechanics.

Prerequisite: Mathematics 12. Mathematics 13 is desirable but not required.

Through the year. M.W.F., 11. Mr. Roope
Omitted 1949-50.

23. Electricity and Magnetism. The fundamental laws of electric and magnetic circuits and fields are treated. The elements of electromagnetic wave propagation and their application to antenna design are included in this treatment.

Prerequisites: Physics 11 and Mathematics 12. Mathematics 13 is desirable but not required.

Through the year. Tu. Th. S., 10; Tu. or Th., 2. Mr. Gunter

24. Advanced Electronics. This course is a detailed theoretical study of certain electronic phenomena from a mathematical point of view.

Prerequisites: Physics 23 and Mathematics 12. Mathematics 13 is desirable but not required.

Through the year. Tu. Th.S., 11. Mr. Gunter

Omitted 1949-50.

DEPARTMENT OF PSYCHOLOGY

Professor Werner, (Professor Weinreb) Associate Professor Bell, Associate Professor Alper, Associate Professor Wapner, Associate Professor Affiliate Meyer, Associate Professor Affiliate Wyatt, Assistant Professor Gilson, Assistant Professor Gwinn, Assistant Professor Affiliate Phillips, Visiting Lecturer Murdock, Visiting Lecturer Rapaport

The psychological laboratories at Clark University were established by G. Stanley Hall immediately after the founding of the University, and constituted one of the first adequately appointed laboratories in this field in America. These laboratories increased rapidly in size and in research possibilities for experimental psychology, and have recently been remodeled in accordance with present needs. From the outset this research emphasis on experimental psychology was supplemented by work in child study, educational psychology, and mental hygiene. In recent years a comprehensive training program in clinical psychology has been added. Broad integrated training in psychology is stressed, with special concentration being provided in the areas of child and genetic, clinical, and general experimental psychology.

UNDERGRADUATE WORK

The undergraduate curriculum is designed to meet the needs of: (1) students majoring in psychology; (2) majors in related fields; (3) students wishing an orientation to the field of psychology for general cultural development.

Majors are required to take Psychology 11a, 11b, and Psychology 212. Psychology 11a and 11b are prerequisite to all subsequent courses. Students preparing for graduate work should obtain a reading knowledge of French and German.

GRADUATE WORK

Work is offered in the department leading to the degrees of Master of Arts and Doctor of Philosophy. In order to be admitted to the department for a higher degree, the applicant must have a bachelor's degree based upon a distinguished college record. Where the department feels that a student lacks the necessary undergraduate preparation in psychology and related fields, specific courses of study will be prescribed.

THE DEGREE OF MASTER OF ARTS. To qualify for the degree of Master of Arts in psychology the student must demonstrate competence in representative areas of psychology. The customary program is five courses, including experimental psychology, statistical methods, and three additional courses supplemented by the writing of a thesis in the area of special interest.

THE DEGREE OF DOCTOR OF PHILOSOPHY. Only students who give evidence of high scholastic attainments will be encouraged to proceed to the degree of Doctor of Philosophy. The obtaining of a Master of Arts degree does not automatically admit the student to the doctoral program. The general requirements for the doctor's degree, other than those for specialization in clinical psychology, include the following. The student is required to pass with distinction five courses during the first year of graduate study and a minimum of two courses during the second year of study. At the end of the second year he is required to demonstrate his competence in psychology by passing with distinction preliminary examinations in the field of psychology as a whole and in an area of specialization. At the present time examinations in the general field include history and systems of psychology, experimental psychology, genetic psychology, learning, normal and abnormal personality, and statistics. In addition, the student is required to demonstrate his ability to conduct independent research as evidenced by the presentation of an acceptable thesis. For formal thesis requirements and language requirements, see the general statement concerning advanced degrees (See pages 51 and 52). At a final oral examination a student is required to defend his thesis and to show his competence in the general field of psychology and in his special area of concentration.

The Program in Clinical Psychology. The department offers a four-year program in clinical psychology leading to the degree of Doctor of Philosophy to students in the V.A. Clinical Psychology Training Program and to those not associated with it. For this degree the same standards of proficiency in the general field of psychology as mentioned above apply. In addition the student will be required to demonstrate mastery of the use of clinical methods. Provision is made for a wide variety of practical experience in coöperating institutions, clinics, and agencies.

A minimum of one year of internship, or its equivalent, is included in this four-year program. Among the institutions and agencies cooperating in providing practicum and research facilities are: Bedford V. A. Hospital, Boston V. A. Mental Hygiene Clinic, Clark University V. A. Guidance Center, Cushing V. A. Hospital, Northampton V. A. Hospital, Family Service Organization of Worcester, Worcester Boys' Club, Worcester Girls' Club, Worcester Youth Guidance Center, Worcester State Hospital, and certain schools.

During the first two years the student will include in his program courses basic to a thorough understanding of psychology as well as specialized courses in clinical psychology. He will be required to take the regular preliminary examinations; in this case the examination in the area of specialization will be in clinical psychology.

COURSES IN PSYCHOLOGY as they were given in 1949-50

First Semester

PSYCHOLOGY (Group B) Cat. p.153 1st sem. courses

11	General Psychology	Wapner
170a	Intro. to Child Psychology	Mrs. Alper
190a	Industrial Psychology	Gilson
203	Intro. to Clin'l & Abnor. Psych.	Bell
204a	Guid. in Childh'd & Adoles.	"
209	Developmental & Child Psych. (Psy.11 & 1 add'l sem. course in Psych. required)	Werner
212	Experimental Psychology	Wapner (Psy.11 &
214	Tests & Meas'ments Applied to Psych. & Educ. Problems	Jones
300	Genetic Psychology	Werner
301a	Methodology in Clin. Psych., I	Phillips
302a	Methodology in Clin. Psych., III	Bell
305	Adv. Experimental Psych.	Werner
306a	Methodology in Clin. Psych., VI	Miss Meyer
313	Statistical Methods	Jones
315a	Exper. Methodology & Design	Wapner
316	Dynamics of Deviant Behavior in Children	Weinreb
318	Dynamics of Personality & Abnormal Behavior	To be announced
323a	Current Lit. & Case Study in Clinical Psych.	Wyatt
331	The Learning Process	Gwinn
339	Hist. & Theoretical Viewpoints in Psychology	Gwinn
340	Departmental Colloquium	Staff & Graduate Stu
345	Seminar in Current Psych. Lit.	Staff students
350	Research in Psychology	Staff

Second Semester 1949-50

HOLOGY

11	General Psychology	Dr. Wapner
200b	Social Psychology	Dr. Gwinn
201b	Educational Psychology	Dr. Jones
202b	Personality Dev. in Children & Adolescents	Mrs. Alper
203	Intro. to Abnor. and Clinical Psych.	Dr. Bell
209	Develop. and Child Psych.	Dr. Werner
212	Experimental Psych.	Dr. Wapner
214	Tests and Measurements	Dr. Jones
300	Genetic Psychology	Dr. Werner
301b	Clin. Psych. II, Psych'l Diag's of Children	Miss Meyer
302b	Clin. Psych. IV, Projective Techniques	Dr. Phillip
303b	Clin. Psych. V, Psych. Interviewing and Counseling Techniques	Dr. Bell
304b	Behavior Problems in School Children	Dr. Bell
305	Advanced Exper. Psych.	Dr. Werner
306b	Clin. Psych. VII: The Thematic Apperception Test	Dr. Wyatt
313	Statistical Methods in Psych.	Dr. Jones
314b	Exper. Social Psych.	Mrs. Alper
316	Dynamics of Deviant Behavior in Children	Dr. Weinreb
318	Dynamics of Personality and Abnormal Behavior	Dr. Rapapor
325	Cultural Anthropology	Dr. Murdock
331	The Learning Process	Dr. Gwinn
335	Social Psych.	Visiting Lecturer
339	History and Theoretical Viewpoint in Psych.	Dr. Gwinn
340	Colloquium	
345	Seminar	
350	Research	
361b	Field Work in Clin. Psych. II (Required of students in 301b)	Miss Meyer
362b	Field Work in Clin. Psych. IV & V (Req'd of students in 302b)	Phillips an

Research for the dissertation should normally be started during the year of internship and be completed during the fourth year at the University.

In light of the costs of supervision and other special services in connection with instruction in the clinical psychology program, the tuition is $500 per academic year in this program.

COURSES IN PSYCHOLOGY

During the academic year 1949-50, the following courses in psychology were given: 11, 170a, 190a, 200b, 201b, 202b, 203, 204a, 209, 210a, 212, 214, 300, 301, 302, 303b, 304b, 305, 306, 313, 314b, 315a, 316, 318, 323a, 324, 325, 331, 335, 339, 345, 350, 361, 362, 363b.

(No description of 323a)

1. PRIMARILY FOR UNDERGRADUATES

11a. General Psychology. An introduction to the principles of human behavior.

Half course. First semester. Tu. Th. S., 8. Mr. Wapner

11b. General Psychology.

Prerequisite: Psychology 11a.

Half course. Second semester. Tu. Th. S., 8. Mr. Wapner

170a. Introduction to Child Psychology. An introductory course in child psychology with special emphasis on factors affecting the social development of the young child.

Half course. First semester. M.W.F., 12. Mrs. Alper

190a. Industrial Psychology. The application of psychological techniques to the problems of business and industry.

(For students in Business Administration.)

Half course. First semester. Tu., 3-5, Th., 4-5. Mr. Gilson

2. FOR ADVANCED UNDERGRADUATES AND GRADUATE STUDENTS

200b. Social Psychology. A survey of current knowledge about the role of the social environment in the determination of individual behavior.

Half course. Second semester. W. F., 2-3:30. Mr. Gwinn

201b. EDUCATIONAL PSYCHOLOGY. A study of psychological principles as they bear upon learning and other problems of education.
Half course. Second semester. S., 11-1. MR. JONES

202b. PERSONALITY DEVELOPMENT. This course will deal with a number of the determinants of personality formation including both constitutional determinants and culturally imposed factors. Current theories of personality development will be surveyed and the application of these theories to the study of personality will be discussed.
Half course. Second semester. M.W.F., 12. MRS. ALPER

203a. THE ABNORMAL PERSONALITY. The course will be devoted to a study of the development of the abnormal personality and a survey of the major types of abnormal behavior.
Prerequisite: Psychology 202b.
Half course. First semester. M.W.F., 11. MR. BELL

203b. INTRODUCTION TO CLINICAL PSYCHOLOGY. A survey of the theoretical background of the field of clinical psychology. MR. BELL
Half course. Second semester.
Prerequisite: Psychology 203a.
Offered in alternate years. Omitted 1950-51.

204a. GUIDANCE IN CHILDHOOD AND ADOLESCENCE. Principles and methods of guidance in elementary and secondary schools.
Half course. First semester. W., 4-6. MR. BELL

209. DEVELOPMENTAL AND CHILD PSYCHOLOGY. A survey of the principles of development and the problems of child psychology.
Prerequisite: Psychology 11 plus one additional semester course in psychology.
Through the year. W. F., 10. Third hour to be arranged for undergraduates. MR. WERNER

210a. PSYCHOLOGICAL APPROACH TO CITIZENSHIP DEVELOPMENT. A survey and evaluation of the experimental evidence in the field of character and citizenship development of children and adolescents.
Half course. First semester. S., 11-1. MR. JONES

212. EXPERIMENTAL PSYCHOLOGY. A general survey of experimental psychology with the aim of acquainting the student with scientific methods and laboratory technique.

Through the year. Lecture: Tu. Th., 11.
Laboratory: Section A: Tu., 1:30-5
Section B: Th., 1:30-5
MR. WAPNER

214. TESTS AND MEASUREMENTS APPLIED TO PSYCHOLOGICAL AND EDUCATIONAL PROBLEMS. A study of the measurement of aptitude, achievement, interest and attitude. Theoretical considerations and practical problems will be included.

Through the year. M., 4-6. MR. JONES

215a. PHYSIOLOGICAL PSYCHOLOGY. Physiological methods of investigating the mechanisms underlying psychological processes.

Half course. First semester. Tu. Th. S., 10. MR. GWINN
Offered in alternate years. Offered 1950-51.

216a. LEARNING AND MOTIVATION. The role of learning and motivation in behavior.

Half course. First semester. Tu. Th. S., 10. MR. GWINN
Offered in alternate years. Omitted 1950-51.

See list of courses As given in 1949-50, between pp. 166 + 167

3. PRIMARILY FOR GRADUATE STUDENTS

300. GENETIC PSYCHOLOGY. A seminar on the basic principles of genetic psychology.

Through the year. Th., 9-11. MR. WERNER

301b PSYCHOLOGICAL DIAGNOSIS OF CHILDREN. Introduction to problems and methods.

First semester. Th., 9-11. MISS MEYER

301b. INTRODUCTION TO THE RORSCHACH TEST. Introduction to the Rorschach method of personality diagnosis.

Second semester. Th., 7-9 p.m. Not given this way in 1949-50 MR. WYATT

301a Methodology in Clin. Psy. I Mr. Phillips

Methodology in Clin. Psy. III
302a. ~~STUDY OF PERSONALITY THROUGH PROJECTIVE~~ TECHNIQUES. The theory of and supervised practice in projective techniques of personality diagnosis.
First semester. F. 4-6. Bell MR. ~~PHILLIPS~~

Projective Techniques
302b. ~~INTEGRATION OF CASE MATERIAL.~~ The theory of and practice in techniques of integrated clinical analysis.
Second semester. F., 4-6. MR. PHILLIPS

303b PSYCHOLOGICAL INTERVIEWING AND COUNSELING. A study of various methods of interviewing and counseling, with practice in case work. Second semester
~~Through the year~~. F., 8-10; S. 9-11. MR. BELL

304b. BEHAVIOR PROBLEMS IN SCHOOL CHILDREN. Case study methods applied to the understanding and guidance of problem children. Seminars and clinical demonstrations.
Second semester. W., 4-6; S., 9-11. MR. BELL

305. ADVANCED EXPERIMENTAL PSYCHOLOGY. A study of experimental methodology and techniques. In the first semester attention will be given to problems of perception, and, in the second semester, to memory, concept formation and reasoning.
Through the year. Lecture: F., 2-4. MR. WERNER
Laboratory: To be arranged. MR. WERNER AND MR. WAPNER

Methodology in Clin. Psy. VI
306a. ~~THE THEMATIC APPERCEPTION TEST.~~ The clinical use interpretation of thematic productions; the clinical significance of fantasy.
First semester. Th., 7-9 P.M. Miss Meyer. ~~MR. WYATT~~
Omitted 1950-51.

the thematic Apperception test
306b. ~~PSYCHOLOGICAL DIAGNOSIS OF CHILDREN,~~ advanced course. Special problems and case studies.
~~Second~~ Second semester. Th., 9-11. Mr. Wyatt ~~MISS MEYER~~

313. STATISTICAL METHODS. The purpose of this course will be to give an understanding of and practice in the statistical methods most valuable in psychological research.
Through the year. W., 4-6. MR. JONES

314b. EXPERIMENTAL SOCIAL PSYCHOLOGY. A laboratory course in which the principles of scientific investigation are applied to problems in social psychology. In addition to performing a number of standard experiments in social psychology students will also do original research. Areas of experimentation will include topics such as suggestion, the measurement of attitudes, group vs. individual thinking, rumor and opinion polling.

Second semester. W., 1:30-3:30. MRS. ALPER
Omitted in alternate years. Omitted 1950-51.

315a. EXPERIMENTAL METHODOLOGY AND DESIGN. A consideration of general experimental methodology in psychology with special reference to the problems of research planning and experimental design. Various fields will be drawn upon for illustrations.

First semester. W., 4-6. MR. WAPNER

316. PSYCHOANALYTIC APPROACH TO DEVIANT BEHAVIOR. A study of the development of emotional symptoms from the psychoanalytic point of view.

Through the year. F., 10-12. MR. WEINREB
Offered in alternate years. Omitted 1950-51.

317. METHODS OF PSYCHOTHERAPY. The course includes a study of various methods of psychotherapy and their application to actual cases.

Through the year. F., 10-12. Omitted 1949-50 MR. WEINREB
Offered in alternate years. Offered 1950-51.

318. DYNAMICS OF PERSONALITY. Emphasis will be placed on the dynamics common to both normal and abnormal manifestations of personality defenses. The first part of the course will consist of a consideration of normal personality development and personality theory. The latter part will be devoted to a survey of the main types of abnormal behavior, including psychoses, psychoneuroses, psychosomatic disorders, character disorders, hypnosis, and allied phenomena.

Through the year. W., 1:30-3:30. First semester, MRS. ALPER
Second semester, MR. RAPAPORT

323a Current Lit. + Case Study
Two hours; First semester Mr. Wyatt

319b. Experimental Dynamic Psychology. A laboratory course in which the principles of scientific investigation are applied to problems in dynamic psychology. In addition to performing a number of standard experiments students will also do individual research.

Second semester. W., 1:30-3:30. Omitted 1949-50 Mrs. Alper
Offered in alternate years. Offered 1950-51.

320b. The Field of Projective Techniques. Advanced Course. Diagnosis and research with projective methods such as the Word-Association Test, Szondi Test, Expressive Movement Techniques, Play Techniques, etc.

Second semester. F., 2-4. Omitted 1949-50 Mr. Bell
Offered in alternate years. Offered in 1950-51.

324a. Psychopathology and Culture. Discussion of selected studies dealing with the interrelationship of the pathology of personality with the problems and trends of contemporary culture. Case material will be used for illustration.

First semester. Th., 7-9 P.M. Omitted 1949-50 Mr. Wyatt
Offered in alternate years. Offered 1950-51.

325b Cultural Anthropology. The relation of culture to needs, to social relationships and groups, and to geographical factors; the similarity in basic plan but diversity in specific content of cultures; the processes underlying culture change; the interaction of learning, society, culture, and personality.

Second semester. Th., 2-4. Mr. Murdock

331. The Psychology of Learning. Theoretical viewpoints and experiments in the field of learning.

Through the year. Th., 7-9 P.M. Mr. Gwinn

335. Social Psychology. Topics to be considered in this course are: Opinion Research; Propaganda, Rumor; Group Dynamics; Orientation and Theoretical Problems in Social Psychology.

Second semester. Tu., 7:30-9:30 P.M. Visiting Lecturers

339. HISTORY AND SYSTEMS OF PSYCHOLOGY. The historical development of psychological methods, concepts and theories.
Through the year. W., 9-11. MR. GWINN

340. DEPARTMENTAL SEMINAR. "Colloquium"
THE STAFF, GRADUATE STUDENTS, AND VISITING SPEAKERS

345. SEMINAR IN CURRENT PSYCHOLOGICAL LITERATURE.
Through the year. Tues., 7-9. STAFF OF THE DEPARTMENT

350. RESEARCH IN PSYCHOLOGY. Individual direction of students in their research projects. STAFF OF THE DEPARTMENT

FIELD WORK COURSES IN CLINICAL PSYCHOLOGY

(Hours to be arranged)

361a. REQUIRED IN CONJUNCTION WITH 301a. MISS MEYER

361b. REQUIRED IN CONJUNCTION WITH 301b. MR. WYATT

362b
~~363.~~ REQUIRED IN CONJUNCTION WITH 302a, 302b, AND 303.
MR. BELL AND MR. PHILLIPS

366a. REQUIRED IN CONJUNCTION WITH 306a. MR. WYATT

366b. REQUIRED IN CONJUNCTION WITH 306b. MISS MEYER

377. REQUIRED IN CONJUNCTION WITH 317. MR. WEINREB

362b Req'd in conjunction with 302b

DEPARTMENT OF ROMANCE LANGUAGES

Associate Professor Reid, Associate Professor Nicol,
Assistant Professor King, Assistant Professor Ramsey,
Mr. MacQueen

Courses offered in the languages and literatures of France, Spain, and Spanish America have been planned to provide:

1) an adequate foundation for graduate study or teaching either French or Spanish, or both;
2) an extensive reading knowledge of both languages, essential for carrying on advanced study in natural sciences, social sciences, and the humanities, and for fulfilling the language requirement for the degree of Bachelor of Arts;
3) a competent speaking knowledge of both languages.

A major in Romance Languages must comprise:

1) Four full courses to be chosen from among the following:
    French 13, 114, 123b, 125, 126
    Spanish 13, 114, 115, 123b
    Romance Languages 124a
2) French 113 or the equivalent.
3) History 10, or the equivalent, to be completed by the end of the sophomore year.
4) at least one course, to be approved by the department, in non-Romance literature.

Students majoring in Romance Languages are expected to acquire a thorough knowledge of either French or Spanish and a competent, knowledge of the other, both in language and in literature.

If at least two units of elementary Latin or elementary Greek have not been accepted for admission to college, the Romance Language major must satisfy the classics requirement as prescribed on pages 66 and 67.

Students desiring a degree with honors in Romance Languages should consult with the department for a statement of the required program of studies.

Students intending to major in Romance Languages should consult Mr. Reid.

FRENCH

During the academic year 1949-50 the following courses in French were given: 11, 12, 13, 14, 113, 114, and 125.

1. PRIMARILY FOR UNDERGRADUATES

11. ELEMENTARY. For beginners. The elements of grammar and pronunciation; extensive, carefully graded reading; exercises in speaking and writing simple French.

Indivisible course.

Open to freshmen.

Through the year. M.W.F., 10 and 12; Tu. Th. S., 8.

MR. KING AND MR. MACQUEEN

12. INTERMEDIATE. Review of grammar, exercises in composition and pronunciation, intensive and extensive reading in a variety of modern texts.

Prerequisite: French 11 or the equivalent, to be determined by a placement test.

Indivisible course.

Open to freshmen.

Through the year. M.W.F., 8; Tu. Th. S., 9.

MR. MACQUEEN AND MR. RAMSEY

13. THIRD-YEAR ORAL AND WRITTEN FRENCH. A rapid intensive review of grammar; the elements of phonetics; exercises in composition and pronunciation; conversational practice. Course 13 is conducted largely in French.

Prerequisite: Grade of B– or higher in French 12, or equivalent skill in the language, to be determined by a placement test. Admission is subject to the approval of the instructor.

Open to freshmen.

Through the year. W.F., 9 and M., laboratory 1 to 3. MR. REID

14. READINGS IN FRENCH LITERATURE. The aim of French 14 is two-fold: the attainment of facile reading ability and the appreciation of at least ten works selected from various periods and chosen for their literary excellence and universal appeal.

Prerequisite: French 12 or the equivalent, to be determined by a placement test.

Open to freshmen.

Through the year. M.W.F., 9 and 11. MR. NICOL

113. INTRODUCTION TO FRENCH CIVILIZATION. A selective survey of the history, art, literature and music of France, from the Middle Ages to the present time. An elementary reading knowledge of French is desirable but not required. Admission is subject to the approval of the instructor.

French 113 may be counted in fulfillment of the general requirement in art, music and literature, but not toward fulfillment of the requirement in foreign language.

Through the year. Tu. Th. S., 11. Some meetings are held in the Worcester Art Museum. MR. NICOL

114. GENERAL VIEW OF FRENCH LITERATURE. An interpretation of the main currents of French literature from the beginnings of writing in the vernacular to the present day. Each period will be studied by concentrating attention on a limited number of works and authors best bringing to focus the characteristics of the period.

Prerequisite: Grade of B– or higher in French 13 or 14 or the equivalent.

Through the year. Tu. Th. S., 10. MR. KING

125. PRINCIPAL PROSE GENRES. Detailed study of the novel, the short story and the essay, as exemplified by the chief works in each genre from the Middle Ages to the present. Some attention will also be given to the writers of maxims, memoirs and letters. Conducted in French.

Prerequisite: Grade of B– or higher in French 114 or the equivalent.

Through the year. Tu. Th. S., 9. MR. NICOL

To be omitted 1950-51. Offered in alternate years.

126. Poetry and Drama. Intensive study of the principal monuments of each genre, from the Middle Ages to the present. Conducted in French.

Prerequisite: Grade of B– or higher in French 114 or the equivalent.

Through the year. Tu. Th. S., 9. Mr. Nicol

Omitted, 1949-50. Offered in alternate years.

123b. Advanced Language. Advanced composition and special study of grammatical topics.

Prerequisite: Grade of B– or higher in French 13. Romance Languages 124a is desirable but not required.

Half course. Second semester. Mr. Reid

Omitted 1949-50. Offered when the demand warrants.

Romance Languages 124a. Comparative French and Spanish Phonetics. The elements of general phonetics. A detailed study of the pronunciation of French and Spanish. A required course for majors who wish to be recommended for teaching either language.

Prerequisite: Grade of B– or higher in French 13 or Spanish 13.

Half course. First semester. M.W.F., 10. Mr. Reid

Omitted 1949-50. Offered in alternate years.

SPANISH

During the academic year 1949-50 the following courses were given: 11, 12, 14, and 114.

1. PRIMARILY FOR UNDERGRADUATES

11. Elementary. For beginners. The elements of grammar and pronunciation; extensive, carefully graded reading in both the Spanish and Spanish-American fields. Exercises in speaking and writing.

Indivisible course.

Open to freshmen.

Through the year. M.W.F., 11; Tu. Th. S., 11. Mr. Reid

12. INTERMEDIATE. Review of grammar, exercises in composition and pronunciation, intensive and extensive reading of texts dealing with Spain and Spanish America.

Prerequisite: Spanish 11, or the equivalent, to be determined by a placement test.

Indivisible course.

Open to freshmen.

Through the year. Tu. Th. S., 10 and M.W.F., 8.

MR. MACQUEEN AND MR. REID

13. THIRD-YEAR ORAL AND WRITTEN SPANISH. A rapid intensive review of grammar; the elements of phonetics; exercises in composition and pronunciation; conversational practice. Course 13 is conducted largely in Spanish.

Prerequisite: Grade of B– or higher in Spanish 12, or equivalent skill in the language, to be determined by a placement test. Admission is subject to the approval of the instructor.

Open to freshmen.

Through the year. Tu. S., 11 and Th., laboratory 1 to 3.

MR. RAMSEY

Omitted in 1949-50. Offered in alternate years.

14. READINGS IN SPANISH AND SPANISH-AMERICAN LITERATURE. The aim of Spanish 14 is two-fold: the attainment of facile reading ability and an appreciation of some outstanding examples of Spanish and Spanish-American literature.

Prerequisite: Spanish 12, or the equivalent, to be determined by a placement test.

Open to freshmen.

Through the year. M.W.F., 10; Tu. Th. S., 8. MR. RAMSEY

114. THE LITERATURE OF SPAIN. A general view of Spanish literature with emphasis on the study of the origins and development of the novel and drama, culminating in the masterworks of the nineteenth century. Necessary attention will be given to political and cultural background.

Prerequisite: Grade of B– or higher in Spanish 13 or 14 or the equivalent.

Through the year. MR. RAMSEY

To be omitted 1950-51. Offered in alternate years.

115. SPANISH-AMERICAN LITERATURE. The principal literary trends in Spanish America from the colonial period to the present day. Special emphasis will be placed on novels and short stories important to the understanding of the nature and problems of life in Latin America.

Prerequisite: Grade of B– or higher in Spanish 13 or 14, or the equivalent.

Through the year.

Omitted 1949-50. Offered when the demand warrants.

123b. ADVANCED LANGUAGE. Advanced composition and special study of grammatical topics.

Prerequisite: Grade of B– or higher in Spanish 13, and preferably Romance Languages 124a.

Half course. Second semester.

Omitted 1949-50. Offered when the demand warrants.

ROMANCE LANGUAGES 124a. COMPARATIVE FRENCH AND SPANISH PHONETICS. The elements of general phonetics. A detailed study of the pronunciation of French and Spanish. A required course for majors who wish to be recommended for teaching either language.

Prerequisite: Grade of B– or higher in French 13 or 112, or Spanish 13.

Half course. First semester. M.W.F., 10. MR. REID

Omitted 1949-50. Offered in alternate years.

COURSES IN RUSSIAN

These courses are offered to enable students to acquire a reading knowledge of the language.

RUSSIAN 11. ELEMENTARY RUSSIAN. Basic grammar and vocabulary.

Through the year. MR. RAEFF

RUSSIAN 12. INTERMEDIATE RUSSIAN. Advanced grammar. Reading and conversation.

Through the year. Omitted 1949-50 MR. RAEFF

COURSES IN SOCIOLOGY

A description of the offerings in Sociology and a list of courses in Sociology will be found in the announcement of the Department of Economics and Sociology.

COURSES IN SPANISH

A description of the offerings in Spanish and a list of courses in Spanish will be found in the announcement of the Department of Romance Languages.

The Summer Term

July 5 to August 18

A six-week summer school was established in 1921, primarily to serve teachers who were employed during the regular academic year. Its organization and its offerings were relatively independent of the general university program.

The national emergency beginning in 1941 made it desirable to provide opportunities for college students to complete their requirements for a bachelor's degree in as short a time as possible. Accordingly the summer school was lengthened to twelve weeks and made an integral part of the college program. With the passing of the emergency and with the demands for acceleration decreasing, the twelve-week summer was discontinued at the close of the 1949 session.

For the summer of 1950 a return will be made to a summer school slightly more than six weeks long, extending from July 5 to August 18. Work will be offered in Economics, Education, English, Geography, and History and International Relations. A *core theme,* American Citizenship, has been selected. Studies will be knit together by a *core course* under the title *Social Factors in American Citizenship.* At each meeting of this course instructors from the several fields involved in the term's offerings will participate. There will be a workshop in each participating field and also supplementing courses. Election of the core course will not be obligatory. The work of the summer school will be planned especially for graduate students, undergraduates at the junior and senior levels, and teachers at the secondary school or college level.

Work done in the summer term may be counted toward the fulfillment of the requirements for the degrees of Bachelor of Arts, Bachelor of Business Administration, Master of Arts, and Doctor of Philosophy. Certain courses may also be carried as free electives toward the degree of Bachelor of Business Administration. A graduate student should secure the explicit approval of his major department for any program undertaken during the summer term.

Unless otherwise announced, subjects are presented in half courses.

A half course, equivalent to three semester hours, involves five sixty-minute periods per week, or their equivalent, throughout six weeks. A normal program is two subjects carried concurrently.

Tuition charges, for a normal program, are $80.00 for the term. The charge for a single subject is $40.00.

Dormitory accommodations for both men and women are available at reasonable rates.

The Summer Term Bulletin contains descriptions of the various courses to be offered and may be had upon application to THE DEAN OF THE COLLEGE, CLARK UNIVERSITY, WORCESTER 3, MASSACHUSETTS.

COURSES OFFERED IN THE SUMMER TERM OF 1949

Courses are identified by number. The letters "a" and "b" following a course number indicate that the course is offered for the first session or for the second session respectively. Any particular course bears the same identifying number whether it is offered during the regular academic year or in the summer term. Courses primarily for undergraduates have numbers beginning with the figure "1," those for advanced undergraduates and graduate students, with the figure "2," and those primarily for graduate students, with the figure "3."

The following courses were given during the 1949 summer term.

BIOLOGY

ST 11.	General Biology	MR. NUNNEMACHER AND MR. POTTER
ST 18b.	Genetics	MR. POTTER
ST 221a.	Embryology	MR. NUNNEMACHER

BUSINESS ADMINISTRATION

ST 17a.	Public Speaking	MR. ILLINGWORTH
ST 18.	Business Organization and Finance	MR. HARGEST
ST 181b.	Industrial Management	MR. GILSON

ST 182a.	Office Management	Mr. Hargest
ST 183.	Industrial Relations	Mr. Gilson
ST 227b.	Auditing	Mr. Hargest

CHEMISTRY

ST 11.	General Chemistry	Mr. Martell
ST 12a.	Qualitative Analysis	Mr. Martin
ST 14b.	Quantitative Analysis	Mr. Martin
ST 15.	Elementary Organic Chemistry	Mr. Martell

ECONOMICS

ST 11.	Principles of Economics	Mr. Lucas
ST 26.	Government and Industry	Mr. Lucas

EDUCATION

ST 202b.	A History of Education in the United States	Mr. Johnson
ST 206b.	The Teaching of Social Studies in Secondary Schools	Mr. Johnson
ST 215b.	Workshop in Character and Citizenship Development in Schools	Mr. Jones and Special Lecturers and Consultants

ENGLISH

ST 12a.	Public Speaking	Mr. Illingworth
ST 15.	A Survey of English Literature	Mr. Anderson and Mr. Moore
ST 16b.	Advanced Composition	Mr. Moore
ST 111a.	A Survey of American Literature	Mr. Anderson

FRENCH

ST 12.	Intermediate French	Mr. Nicol and Mr. MacQueen
ST 14.	Readings in French Literature	Mr. Nicol and Mr. MacQueen

GEOGRAPHY

ST 10.	Principles of Geography	Mr. Olson
ST 191.	Cartography	Mr. Burnham
ST 21b.	Principles of Physiography	Mr. Lougee
ST 28b.	Geography of New England	Mr. Lougee
ST 201.	Political Geography	Mr. Olson
ST 285b.	Present European Problems	Mr. Van Valkenburg
ST 32b.	Climatology	Mr. Van Valkenburg

GERMAN

ST 12.	Intermediate German	Mr. Edwards and Mr. Bosshard
ST 13.	Readings in German Literature	Mr. Edwards and Mr. Bosshard

HISTORY AND INTERNATIONAL RELATIONS

ST 11a.	Medieval Europe	Mr. Lee
ST 131b.	The United States in the 19th Century	Mr. Campbell
ST 22a.	Tudor and Stuart England	Mr. Jordan
ST 212a.	Europe since 1914	Mr. Lee
ST 221a.	England since 1760	Mr. Jordan
ST 234b.	American Diplomatic History	Mr. Hayden
ST 235b.	The United States in the 20th Century	Mr. Campbell
ST 274b.	The Modern Far East	Mr. Hayden

MATHEMATICS

ST 12.	Analytical Geometry and Calculus	Mr. Bumer
ST 14.	Advanced Calculus	Mr. Bumer

PSYCHOLOGY

ST 11.	General Psychology	Mr. Weiner

SOCIOLOGY

ST 11.	Principles of Sociology	Mr. Killian
ST 12a.	Introduction to Cultural Anthropology	Mr. Killian
ST 21b.	The Family and Society	Mr. Killian

SPANISH

ST 12.	Intermediate Spanish	Mr. King and Mr. Reid
ST 14.	Readings in Spanish and American Literature	Mr. King and Mr. Reid

The Degree of Bachelor of Education

The Degree of Bachelor of Education has been offered primarily to teachers in the Worcester school system and to those in nearby towns since 1923. A condition for admission to candidacy for the degree is completion of a two-year normal school course, or its equivalent. A year of professional, full-time teaching experience is a prerequisite for the degree.

Since the State Teachers College of Worcester began granting a bachelors degree the reasons for offering such a degree have largely ceased to exist, and there has been a material shrinkage in the number of candidates.

At present new candidates may be accepted, if at all, only after special action.

Degrees Conferred

IN THE CALENDAR YEAR 1949

BACHELOR OF ARTS

Lloyd Byron Addington, Jr.
Richard Francis Adrian
Sidney Agulnick
Richard Joseph Altobelli
Barbara Irene Antzes
Ralph Angelo Armenti
John Joseph Archambault
Ruth Joy Atwood
Doris Gertrude Audette
(With Honor in General Course and with Honors in Romance Languages)
Stephen Hopkins Baker
James Emil Ballan
James Joseph Barrett, Jr.
René Paul Beaudry
Roger Douglas Bernklow
Roger Wesley Bibeau
Syma Birnbaum
Geraldine Irma Blume
Mitchell Burton Booth
Florence Agnes Boudreau
Stanley Melvin Boynton
Donald Logan Brigham
Patricia Virginia Bubar
Betty Elaine Bugbee
Carl Butenas
(With Honor in General Course)
Therese Imelda Butler
Russell Erwin Byron
Barbara Ann Callan
Louis Peter Carini
(With Honors in Psychology)
Ruth Eleanor Carlson
Arnold David Chase
Harold Charles Champeau
(With High Honor in General Course)
Janette Christie
Libro Ciani
Peter Elia Comalli, Jr.
Eleanor Anne Costello
Paul Romeo Cournoyer
Jack Burton Coyle
Thomas Harrison Coyle
George Edgar Crickard, Jr.
Harold Ernest Crockett
Olive Louise Cross
Richard Charles Daniels
David B. Davidian
Robert James Dean
Edward Joseph Desroches
Roberta Barratt Dobie
Kenneth Charles Dornes
Arthur Oscar Dryer
Norman Joseph Edinberg
(With Honor in General Course)
Albert Robert Elby
George Nicholas Eliopulos
Wonna George Eliopoulos
Marion Frances Ericson
Willy Falk
John Stanley Fipphen
Philip Brierly Fisher
Joan Marie Flaherty
Aubyn Freed
(With Honor in General Course)
James Charles French, Jr.
Anna Loraine Frissora
Fred John Galanto
(With Honor in General Course and with Honors in History and International Relations)
Richard Edward Gardner, Jr.
Barbara Mary Gearin
John Russell Golner
Alfonso Gonzalez
(With High Honor in General Course and with Honors in Geography)
Charles David Goodman
(With Honor in General Course and with Honors in Physics)
Harold Oliver Graves
Robert Fried Green
(With Honors in Economics and Sociology)
Ruth Elizabeth Green
Ann Talbot Guest
Russell John Gustafson
Nettie Thayer Gwynne
Gilbert Arlen Haberman

Richard John Haddad
Jean Barrow Harris
Peter Hartocollis
Harold Walter Hedberg
Martin Heller
William Thomas Higgins
Charles Carroll Hixon
Irja Rachel Hofschire
(With Honor in General Course and with Honors in German)
Helen Flygare Hortman
Jacob Cyrus Hortman, Jr.
Mitchell Jaffe
Harold Jameson, Jr.
Allan Wilbur Jewell
Dorothy Ann Johnson
(With Honors in Chemistry)
Phyllis Elaine Kane
David Hodgkins Kellogg
James Malcolm Kemp
David John Kneeland
Carolyn Knight
(With Honors in Geography)
Irene Rose Krajewski
Therese Mary Labenski
Raymond Lloyd LaPierre
Mary Despina Lekas
Francis Edward Lepore
Lorraine Theresa Leroux
Alfred Jacob Levy
Richard Robert Liberty
Betty Pauline Ljungberg
Norman Dale MacKay
Ruth Beatrice Mancevice
(With Honors in German)
Kathryn Lovejoy McCabe
John Joseph McDonald
Mary Elizabeth McGrath
John William McMurtrie
Michael George Mensoian, Jr.
Esther Barbara Mero
Richard Paul Mitchell
(With High Honor in General Course and with Honors in History and International Relations)
Richard Andrew Moffatt
Marion Louise Moriarty
Gerald Joseph Morin
William Richard Moseley
Benjamin Joseph Murawski
(With High Honor in General Course and with Honors in Psychology)
Pauline Anne Murray
Charles Willis Naas
(With Honors in History and International Relations)
Robert Ferdinand Nims
Agnes Mary O'Connor
Barbara June Ostroff
Leonard Domenic Pagnotto
Melvin Mayer Palley
Catherine Anne Carswell Pallrand
Berend David Pannkuk
Daniel James Pappas
Edward Thomas Parker
Jacob Carl Pincus
(With Honor in General Course and with Honors in Economics and Sociology)
Bradford Barrett Plue
Robert Charles Plumb
(With Honor in General Course)
Henry William Pope, Jr.
Kenneth William Pratt
George John Puniskis
William Robert Reardon
Martin Matthew Reddy
Benjamin Victor Reed
David John Rees
David Gage Reycroft
Wendell Slayton Richardson
(With Honor in General Course and with Honors in History and International Relations)
Alan Lester Rosenberg
George Rubin
John Donaher Ryan
(With Highest Honor in General Course and with Honors in Physics)
Catherine Isabella Sandy
Millicent Jean Sanford
William Warren Sanford
(With Honors in Biology)
Bernard Schwab
Francis Paul Sheehan
Frank Joseph Shimukonis
Harris Skiddell
Robert Frank Slechta
Samuel Wallace Smith, Jr.
Nathan Spungin
Gilbert Boynton Stewart
Theodore Grover Stuebi, Jr.
Ralph John Stupak
Edward Freeman Swansburg
John Edward Tashjian
John Roy Thomson

Edmund Lincoln Tivnan
Joseph Robert Todd
Joyce Townsend
(With High Honor in General Course)
Bertil Lennart Wahlberg
Ruth Anna Williams
Carol Wilson
Florence Joanne Witkowski
Russell Howard Woessner
William James Wylie, Jr.

BACHELOR OF BUSINESS ADMINISTRATION

Robert Arent Abeles
John Henry Anderson
William Aramony
(With Honor in General Course and with Honors in Business Administration)
Lauren Earl Baxter
Oliver Wendell Boch
John Peter Boxshus
Edward Cuthbert Camp, Jr.
Robert Harrison Carey
(With High Honor in General Course)
James Francis Cronin, Jr.
Carolyn Anne Dolan
Sheila Veronica Donoghue
Lawrence Calvin Drury
Charles Waldo Ela
Raphael Milton Feldman
Anthony Joseph Femina
Paul Robert FitzGerald
Samuel Julius Freelander
Louis Charles Gallo
Stuart Calvert Gibson
William Eldon Harris
Albert Spero Hayeck
(With Honors in Business Administration)
David Arthur Helm
Forrest Ivan Higginbotham
Nelson Richards Hill
George Everett Holmes
Hagop Herach Jamgochian
Dudley Palmer Jones
Martin Leo Keegan, Jr.
Robert Leo Kelleher
Milton Leavitt
Anthony Daniel Leone
Robert Wells Menard
Thomas Joseph McDonough, Jr.
Stanley Lucius Michelson
Vasken Minasian
Joseph John Panaccione
George John Puniskis
Edward William Quinn
Flavio Joseph Rosati
Ruth Cele Rupkus
Richard Stanley Smith
George Joseph Sonntag, Jr.
Constantine Thomas
Rolf Scott Tonseth
Joseph Anthony Turo
Charles Victor Vilandre

BACHELOR OF EDUCATION

Alice Brennan Larkin
Helen Louise Wright

MASTER OF ARTS

Alexis Adrian Babineau
Bernard Baum
Richard Carson Brown
Henry Lewis Buzzard
Kenneth Ashton Chandler
Ching Chieh Chang
Loren Orville Crain
Doris Adeline Derby
John Francis Foley
Harold Leon Green
Winnifred Morton Irwin
Engbert Jan Coen Kiewiet de Jonge
George Robert Kaplan
Oliver Herman Laine
Aldonna Lapinskas
Edward Emile LeClair, Jr.

William Butler Martin, Jr.
Anne Marie McBreen
Albert Norman
Bruce Crossan Ogilvie
Howard Leonard Ohman
Clementine Patricia Razzo
Lewis Theodore Reinwald
Joseph Hans Rosenbaum
Ann Marie Shaughnessy
John Andrew Sobol
Albert Brown Southwick
Richard Waltner Swenson
Albert Bristol Turner
David Elliott White
Walter Henry Zukowski

MASTER OF ARTS IN EDUCATION

Malcolm Everett Baird
Carlton Foch Cormier
Robert Frederick Derosier
Raymond Bertil Hill
Paul Donald Malboeuf
Lester Ward Parker
Arthur Francis Sullivan

DOCTOR OF PHILOSOPHY

Sherman Raymond Abrahamson
Lewis McElwain Alexander
Myron Adelbert Baskin
Charles Newton Brickley
Michel Brunet
Dorothea Edythe Burton
Robert Dale Campbell
Stanley Chaberek, Jr.
Edwin Stanley Costrell
Veva Kathern Dean
James Lennon Duffy
Albert Edward Frost, Jr.
Mohamed Ibrahim Hassan
Frank Henry Healey, Jr.
Colbert Colgate Held
John Fred Holly
Richard Blazo Martin
Peter B. Schroeder
Edward Elliott Sinclair
John Jacob Singer, Jr.
Alfred Rockwell Sumner
Roy Paul Terrell
Milton Gershon Weiner

HONORARY DEGREES

Samuel Nathaniel Behrman	Doctor of Letters
Colgate Whitehead Darden, Jr.	Doctor of Laws
Harry Frank Guggenheim	Doctor of Laws
Charles August Kraus	Doctor of Science
Edmund Randolph Laine	Doctor of Humane Letters
Francis Henry Taylor	Doctor of Letters

SUMMARY

Degrees in Course	
Bachelor of Arts	166
Bachelor of Business Administration	46
Bachelor of Education	2
Master of Arts	31
Master of Arts in Education	7
Doctor of Philosophy	23

Honorary Degrees	
Doctor of Laws	2
Doctor of Letters	2
Doctor of Humane Letters	1
Doctor of Science	1

Register

Names of students are grouped in three lists. I, graduate students, undergraduate students, and special students in attendance during the regular academic year 1949-50; II, those who attended the 1949 Summer Term; III, students who withdrew after a short time in residence, 1949-50.

I. GRADUATE STUDENTS, COLLEGE STUDENTS AND SPECIAL STUDENTS IN ATTENDANCE DURING THE REGULAR ACADEMIC YEAR

Explanation: S—scholar; F—fellow; TF—teaching fellow; numerals 50, 51, 52, and 53, are used to classify undergraduates; g—students formally admitted to the graduate division; s—special students; Aud—Auditor only. B—biology; BA—business administration; Ch—chemistry; Ec—economics and sociology; Ed—education; En—English; FA—fine arts; Ger—German; G—geography; H—history and international relations; M—mathematics; Ph—physics; Phil—philosophy; Ps—Psychology; RL—romance languages.

State omitted—Massachusetts; town omitted—Worcester; street names refer to streets unless otherwise indicated:

The list includes the names of all who have matriculated and registered. An asterisk (*) indicates a student not in residence for the entire year. A dagger (†) indicates a student entering at the beginning of the second semester.

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Abbas, Naji Mulla	G g	Kirkuk, Iraq	21 Oread
Abbott, Carroll Marden	H g		36 Rollinson Rd.
Ackerman, Jerrold Leonard	52	Waterbury, Conn.	36 Richards
Adams, Elaine Frances	51	Lowell	Woodland Hall
Adams, Theodore Francis	51		28 Suffield
Adrian, Richard Francis	Ed g	Westboro	
Agabian, Merritt	53	Oxford	
Ahern, Thomas Bolton	52	New Haven, Conn.	95 Lakewood
Ahlquist, Stanley Winston	51		38 Parkton Ave.
Ahmadjian, Vernon	52	Whitinsville	
Albert, Leon M.	52		395 Lovell
Aldrich, Charles Raymond	50		10 Bluebell Rd.
Allabashi, John Christo	52	Southbridge	8 Silver
Allard, Robert Stanton	53		Green's Trailer Pk.
Allstrom, Barbara Marianne	52	Auburn	
Allstrom, May Ingrid	50	Auburn	
Alpart, Marilyn	53	Paterson, N. J.	Fanning Hall
Ambrosini, Dario Mario	50		4 Stoneland Rd.
Amsden, Carol Theresa	50		159 Highland
Amsden, Festus Gilbert	51	Orange	
Amsden, Virginia Rita	50		159 Highland
Anderson, Charles Oscar, Jr.	50	Holden	
Anderson, Gunnar Bjork, Jr.	53	Boylston	Estabrook Hall
Anderson, Janet Marie	50	Richmond, Va.	Blakeslee Hall
Anderson, Jean Harriet	50		43 Tower
Anderson, Lloyd	BA s		59 Walworth
Anderson, Roger Burnett	50		11 Prospect
Anderson, Walter Roger	51	Athol	11 Boynton
Andreson, Nicholas Ernest	51		712 Pleasant
Andrey, Erwin	53	Milwaukee, Wis.	Estabrook Hall
Arbo, Walter Leslie	53	Poultney, Vt.	Estabrook Hall
Ardehali, Ali	Ec g	Tehran, Iran.	9 Clifton
Ash, Margaret Mary	50		365 Cambridge
†Asher, Donald Joseph	Ed g		3 Brownell Circle
Asher, Margery Jane	50		99 Coolidge Rd.
Askling, Paul Herbert	51	Leicester	
Atrushi, Siddik Abdul Rahman	G g	Dehok, Iraq	875 Main
Atwell, Donald Lochhart	G g	Sewickley, Pa.	6 Downing
Audette, Doris Gertrude	Ed g		43 Charlotte
Auger, Clifford Melvin	Ec s		377 Pleasant
Austin, Richard Marsh	52	Dudley	35 Maywood
Babigian, Vasgen	51	Shrewsbury	
Babineau, Alexis Adrian	Ch S		Assumption College
Bachmann, Robert Edward	52	East Brookfield	

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Bagni, Stuart Read	52	Haverhill	Quonset Hut
Bailey, Hildreth Caldwell	52	White Plains, N. Y.	Estabrook Hall
Bailey, William Albert	51		3 Apollo Rd.
Baker, Elliot	52	Lynn	36 Richards
Baker, Robert William	Ps g	Brookline	871 Main
Ball, Millicent Elaine	52	Oakdale	
Banks, Donald Alexander	50		56 Fairfax Rd.
Barber, Edward Irving	52	New Hartford, N. Y.	16 Marble
Barnes, Clarence Edward	52	Auburn	
Barnett, Eileen	50	Millbury	
Barnicle, Robert Joseph	52	Fairhaven	9 Stoneland Rd.
Barrett, James Joseph, Jr.	H g		5 Lucian
Barsoum, Peter, Jr.	50		38 Somerset
Bartlett, Mabel Rose	51	So. Lancaster	
Bartuska, Dolores Ann	51	Nanticoke, Pa.	Fanning Hall
Basiul, Walter Joseph	Ed g		56 Perry Ave.
Baskin, Adelbert Fuller	51	Kenmore, N. Y.	6 Agawam
Bastille, John George	50		165 Highland
Baum, Bernard	Ch TF	Brookline	53 Charlotte
Baumgartner, Franklin Wellington	51	Leominster	
Beaudin, Marcia Rita	53	Spencer	
Beauregard, Leonard Joseph	51	Gardner	40 Richards
Belair, Donald Paul	52		Worc. State Hosp.
Belden, Robert Dorr	51	Petersham	
Belliveau, Robert Rock	53		44 Fairfax Rd.
Benjamin, Howard Bennett	52		28 Moore Ave.
Berg, Burton Franklin	51		10 Tahanto Rd.
Berg, George Milton	50		7 Mattson Ave.
Bergstrom, Evelyn Mae	51	Millbury	
Berkowitz, Hilda	53		25 Woodford
Berman, Mildred	G S	Malden	3 Shirley
Bernstein, Frances Gertrude	B s		28 William
Berthiaume, Joseph Omer	50	Southbridge	
*Berthiaume, Raymond Ovila	50		19 Grand
Besnia, Richard Paul	53		30 Institute Rd.
Biancheria, Amilcare	52		16 Prentice
Bird, Frankie Lee	52	Grover, N. C.	37 Eunice Ave.
Blair, Richard Kent	53	Southbridge	Estabrook Hall
Blais, Frederick William	51	West Stewartstown, N. H.	Worc. State Hosp.
Bliss, Edwin Carpenter	53	Taunton	Estabrook Hall
Bliss, Frederick Allen	52	Taunton	74 Florence
Blue, James Leonard	51	Harvard	Estabrook Hall
Bogoian, George	53		49 Florence
Bondra, George	50	Peekskill, N. Y.	95 Lakewood
Borkowski, Theresa Rose	51	Gardner	Woodland Hall
Boryczewski, Walter Edward	53		55 Lafayette
Bosworth, Russell Henry	H TF	Braintree	Green's Trailer Pk.
Boucher, Donald Edward	52	Millbury	
Bouvé, Ruth Cabot	51		14 Richmond Ave.
Bowler, Donald Joseph	52		11 Jaques Ave.
Boyce, Betty Louise	52	Diamond Pt. N. Y.	Blakeslee Hall
Boyden, Helen Rose	51		81 Downing
Brahm, Alexander Emanuel	53		188 Highland
Branagan, Francis Carr	53		150 Mayfield
†Brandes, Gordon Salisbury	52	Webster	
Braverman, Samuel William	52	Bedford	6 Shepard
Brennan, Dorothy Ann	52		82 Birch
Breuker, Burton John	Ed g	Whitinsville	
Brick, Harold Raymond	53		224½ Chandler
Briggs, Harry Caldwell	53		121 Bailey
Brodeur, Jeanne Rosalie	53	Warren	Woodland Hall
Brodeur, Richard Romeo	51	Putnam, Conn.	39 Shirley
Brooks, Blossom Sheila	53		78 May
Brooks, Harriet	Ed g		78 May
Brooks, Marvin Sidney	52		78 May
*Brown, Bernice Eululoo	51	Grafton	Fanning Hall
Brown, Mary Elizabeth	53	Auburn	
Brown, William Joseph	50	Shrewsbury	

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Brown, Winthrop Curtis	51	Springfield	9 Clifton
Brudno, Audrey Ruth	51	Brighton	Blakeslee Hall
Bruno, Arthur John	Ch TF	East Douglas	
Bruso, Jean Anne	53		507 Cambridge
Bryant, Marilyn Louise	52		1 MacClary Way
Buchyn, Joseph John	51		6 Gold
Budwick, John Michael, Jr.	53	Gardner	
*Bullan, Cecilia Mary	B s	Gilbertville	Memorial Home, Worc. City Hosp.
Bult, Richard Baker	53	Albany, N. Y.	Estabrook Hall
Bumer, John Quinette	52		121 Richmond Ave.
Bumer, Richard Fuller	52		121 Richmond Ave.
Burgoyne, Harvey James	51		26 Boynton
Burke, Bernard Vincent	51	Seattle, Wash.	95 Perry Ave.
Burke, Charles Stephen	50		9 Kilby
Burke, Richard Diggins, Jr.	Ed g		149 King Philip Rd.
Burstein, Symme Hilda	50		58 Longfellow Rd.
Butler, Bruce A.	BA s		3 Monmouth Rd.
Butler, Mary Alice	52	Oxford	
Butler, Mary Elizabeth	51	Bolton	
Butler, Orton Carmichael	G g	Millersburg, Ohio	30 Hollywood
Butler, Walter Hillman	H g	Rockland, Me.	53 Charlotte
Caefer, Raymond John	50		7 Cutler
Cain, Richard Austin	52	Marlboro	Worc. City Hosp.
Callahan, Bernard Dennen	53		10 Farnum
Callahan, Claire Renee	RL s		18 Harvard
Campbell, Theresa Miriam	53	Southbridge	
Capen, William Melvin	50		110 June
†Carey, Cynthia	Ec s		56 Cedar
Carey, Edward Nicholas	51	Milford	
Carey, Margaret Jean	52		55 Brantwood Rd.
Carey, Robert Vincent	52	Millbury	
Carini, Francis Frederick	Ch g	Framingham	20 Gates
Carini, Louis Peter	Ps TF	Framingham	919 Main
Carlisle, Robert Bruce	50		28 Irving
†Carlo, Francis Bernard	51	Danbury, Conn.	78 Pleasant
Carlon, Kenneth Gustaf	52		1 Willvail
Carlson, Arnold Renaldo, Jr.	52		138 Barnard Rd.
Carlson, Martha Jane	50		213 Suburban Rd.
Carlson, Torsten Allen	50		5 Marconi Rd.
†Carmody, William Clark Joseph	51	Boston	8 Clifton
Carney, Francis Leslie	52		15 Lund
Carofanello, Frank Anthony	53		14 East Shelby
Caron, Blanche Ellen	50	Millbury	
Carroll, Alfred Christopher	51	East Douglas	
Carvalho, Vincent George	Ed g		31 Harvard
Cassidy, Clare Therese	Ed g	Uxbridge	
Castriotta, Raymond Joseph	51	Leominster	16 Marble
Castro, Carlos Manuel de	51	New York, N. Y.	Estabrook Hall
Ceccorulli, Alton Lebro	51	Branford, Conn.	100 Woodland
Cederlund, Albert Merrill	52		16 Steele
Chandler, Kenneth Ashton	Ps g		7 Hawthorne
Chang, Ching Chieh	G g	Chia-Hsien, Honan, China	46 Tirrell
Charamella, John Laurence	50		38 Cutler
Chartier, Eugene Roland	51		1289 Millbury
Chartrand, Yolande Marie	53		1 Dawson Rd.
Chekas, Aldona Janina	53		167 Vernon
Chen, Philip Stanley, Jr.	51	South Lancaster	
Chesson, Harold Ray, Jr.	50	West Brookfield	
Childs, William Maurice	H g	Springfield	26 Havelock Rd.
*Chin, Philip Shen Tung	50		106 Mechanic
Christodoulopoulos, Efsthathios C.	En s	Leominster	
Chronis, Paula Yista	En s		164 Russell
Ciani, Libro	Ed g		31 Granby Rd.
Ciani, Saverino	51		31 Granby Rd.
Ciborowski, Henry Joseph	51		135 Millbury
Cipriani, Francis Paul	52	Clinton	

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Clark, Howard Leslie	50	Calgary, Alberta, Canada	100 Woodland
Clavien, Yvonne Marcelle	53	Templeton	Woodland Hall
†Clegg, Donald Howard	52	Verona, N. J.	34½ Gates
Clement, Stanley Francis	50	West Roxbury	921 Main
Cocchiola, Jerry Joseph	50	Clinton	
Cochran, Richard Dean	52		955 Pleasant
Cogswell, Anna Elizabeth	53		566 Pleasant
Cohen, Lois Ruth	51		39 Woodford
Cohen, Richard Mark	52	Brookline	40 Richards
Colby, Raymond William	Ed g		43 Freeland
Cole, Joseph Alfred	53	Spencer	
Collier, Christopher	51	Westport, Conn.	Quonset Hut
Collins, John Martin	G g	Kansas City, Mo.	70 Lovell
Collins, Mildred Edith	Ed g		18 Walnut
Collins, Philip Joseph	53	Pittsfield	Estabrook Hall
Commanday, Peter Martin	53	New York, N. Y.	Estabrook Hall
Conlin, John Peter	53		11 Hitchcock Rd.
Connolly, Raymond Joseph, Jr.	52	Marlboro	
Conway, Edward Hartnett	50	Bronxville, N. Y.	100 Woodland
Cook, Mary Elaine	50	Uxbridge	34 W. Main, Millbury
Cooke, Marilyn Flora	53	W. Brattleboro, Vt.	32 Rowena
Cooke, Milton James	52	West Boylston	
Coons, Barbara Mae	53	Framingham	284 Heard
Cooper, Ralph Christian, Jr.	51		22 Minthorne
Cooper, William George, Jr.	53		17 Falmouth
Corey, Roger Marcroft	52	Millbury	
Cormier, George Edward	52		5 Harris Ct.
Coulter, Alan George	53	Chicopee	Estabrook Hall
†Cournoyer, Norman Harvey	Ch s	Webster	
Courtney, Marie Frances	50		42 No. Parkway
Cowley, Benjamin Dollar	B s	Shrewsbury	
†Cowley, Eleanor Delores	Ps s	Shrewsbury	
Crandell, Robert Lynam	53	Shrewsbury	
Crane, Charles Bradford, Jr.	53		54 Delawanda Dr.
*Crane, Donald Curtis	H g	Vernon, N. J.	23 Richards
Creveling, Harold Franklin	G g	Norman, Okla.	6 Richards
Crockett, Harold Ernest	Ec g		28 Irving
Crovitz, Herbert Floyd	53	Cranston, R. I.	Estabrook Hall
Crowley, John Joseph	51		59 Downing
Csizmesia, Frederick William	G g	Providence, R. I.	236 Main, Oxford
Cuccaro, Ernest Oriente	50		4 Alvarado Ave.
Cunningham, Howard Monroe	53	Patten, Me.	Estabrook Hall
Curtis, Nancy Lillian	53		15 Sigel
Cusson, Richard Paul	53		53 Butler
Dagirmanjian, Rose	52	Whitinsville	
Dahlstrom, Arvid Eric	Ed g		198 Vernon
Daneault, Fernand Joseph	50		4 Coolidge Rd.
Daviau, Donald George	50		21 Hancock
Davidson, Chester Joseph	51		10 Sturgis
Davidson, Louie	51	Dorchester	Estabrook Hall
Davis, Allan Satterthwaite	51	Merion Sta., Pa.	16 Marble
Davis, Carl James, Jr.	50	Watertown	
Davis, George Herbert, Jr.	50	Auburndale	9 Stoneland Rd.
Davis, Groves Bradford	52		5 Jenkins
Davis, Richard DeForest	50	Mt. Rainier, Md.	923 Main
Deane, Mary Louise	50	Whitinsville	Blakeslee Hall
Dear, Walter Ching	50		209 Lincoln
Debitetto, Michael Frank	51	Fitchburg	40 Richards
Deebel, William Ralph	G g	Shenandoah, Pa.	931 Main
Degermajian, George	51		1 Patch
DeGuise, Eleanor Anne	52	Dracut	Fanning Hall
Delehanty, Edward John	51	Wallingford, Conn.	59 Maywood
Delle, George Victor	52		14 Pelham
Demers, Sylvio Paul	51		5 Chrome
DerBedrosian, Sarkis	53		10 Woodland
Dik, Robert Edward	50	Townsend	65 Rockland Rd. A'b'rn
Dimitroff, Oliver Ide	51	Paul Smith's, N. Y.	Worc. State Hosp.

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Dingman, Paul R.	Ps g		185 St. Nicholas Ave.
DiRado, George Dana	50	Marlboro	
DiRienzo, John Carl	50	Ashland	
Divoll, Robert Crane	50		33 Navasota Ave.
Dobis, Marcia Rae	52	Wellesley Hills	Blakeslee Hall
Doe, Allen Peirce	53	West Boylston	
Don Francisco, James Joseph	53		65 Prospect
Doran, Mary Agnes	50		356 Chandler
Doris, Robert Morrison, Jr.	53		9 Hawthorne
*Dow, Edwin Peter	50	Rutland	
Dow, Richard Holland	53		394 May
Dowgert, Boleslaw Stanley	H g		17 Fairfax Rd.
Doyle, Robert Francis	52		184 Grafton
Driscoll, Robert Joseph	53	Westport, Conn.	Estabrook Hall
Drucker, Herbert	52	Montclair, N. J.	16 Richards
Dube, Oscar LeRoy	53	Fall River	Estabrook Hall
Duclos, Robert Joseph	53		175 Cohasset
Dumas, Marilyn Ann	53	Fisherville	
Duncan, Thomas	50	New Haven, Conn.	16 Marble
Dunn, John Joseph	50	Shrewsbury	
Dwyer, John Joseph	Ed g		123 Woodland
Dwyer, Richard Edward	51	Dalton	16 Marble
Ecker, Nathalie	51		34 Amherst
Egan, Jean Helen	51	Sterling	
Eklund, William Henry	50		183 Vernon
Ela, Charles Waldo	Ec g		91 May
Ellis, Ralph Warner, Jr.	50		22 Howland Ter.
Emory, Jewell Ann	52		48 William
Epstein, Rosaline	51	Gloucester	Fanning Hall
Erdman, Donald Elmer	52		5 Linden
Erickson, George Carl, Jr.	51	Gardner	
Erickson, Nancy Marie	53		6 Chesterfield Rd.
Ericson, Robert Henry	51	Auburn	
Escolas, Edmond Leon	Ec TF		9 Abington
Ewing, Eleanor Marion	51		6 Northridge
Fahey, Lawrence	52	Brooklyn, N. Y.	50 Woodland
Fairbanks, Margaret Weir	52		23 Bailey
Falk, Gerald David	53	New York, N. Y.	Estabrook Hall
*Falk, Willy	B g	Cairo, Egypt	7 Kilby
Falko, John Michael	50		45 Endicott
Fallon, John Edward	52		12 Florence
Fallstrom, Phyllis Marion	53	Shrewsbury	
Farmer, Eleanor	52	Boylston	
Farr, Jeanne Eloise	51	Dodge	
Farrand, Brent Triest	50	Liberty, N. Y.	16 Marble
Farrell, William Hammond, Jr.	H g	Upper Montclair, N.J.	9 Hawthorne
Faucher, Vincent Roger	Ed g		97 Paine
Feinberg, Martin	53	New York, N. Y.	Estabrook Hall
†Felton, Elizabeth Ann	Ps s		37 Commodore Rd.
Fesuk, Stephen Boris	52		14 Alpine
†Fetherolf, John Warren	53		30 Intervale Rd.
Field, Nancy Spooner	Ch s		20 Stark Rd.
Finan, Joseph Aloysius, Jr.	51	Cranston, R. I.	52 Woodland
Fink, Ernest Haskel	51	Framingham	
Finneran, Rita Elizabeth	Ed g		202 Stafford
Fischer, Constance Rose	53		108 Barnard Rd.
Fischer, Genevieve Agnes	51		108 Barnard Rd.
Fischer, Joyce Kay	53	Bridgeport, Conn.	Fanning Hall
Fish, Howard Leonard	53	Webster	
Fisk, Bradley, Jr.	G S	Buffalo, N. Y.	38 Benefit
Fitzback, Henry Marcel	50	Webster	
Fitzgerald, William Matthew	53		57 Barclay
Flagg, Earle Vincent	51		115 Brooks
Fleming, Marie Frances	50		461 Chandler
Flint, Charles Edward	51	Leicester	
Flynn, Ann Marie	53	Southbridge	Fanning Hall
Flynn, Mary Jane	51	Northboro	

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Fohlin, Harold Bernard, Jr.	51		21 Ball
Fohlin, Patricia Edwards	50		21 Ball
Foley, Joann Marie	52		192 Highland
Foley, John Francis	G g	Fall River	2 Lyman, Northboro
Foley, Vincent Donnell	50		17 Circuit Ave.
Fontaine, Barbara Christeen	52	East Douglas	
Fontaine, Mary Kathleen	50	East Douglas	
Forchielli, Enrico	51		20 Mulberry
Forgit, Raymond Wellington	52	Rochdale	
Forzley, Leo Bashara	51		88 Locust Ave.
Fouracre, Arlene Jane	53	Northboro	
Fowler, William Dubois	51	Wethersfield, Conn.	
Fox, Beverly Jean	51	Sturbridge	Woodland Hall
Fox, Jerome	53	Albany, N. Y.	Estabrook Hall
Fox, Robert William	51	Staffordville, Conn.	Green’s Trailer Pk.
Fraga, Louis Maurice	Ec g		17 Osceola Ave.
Frank, Benis Morton	H g	Stamford, Conn.	941 Main
Frazee, Helen Blanche	53	Groton	19 Wayne
Frazier, Philip North	50	Cambridge	35 Maywood
Freed, Aubyn	Ec s		1 Manila
Freeman, Lois	52	Waltham	305 Belmont
Freitag, Joyce Jacqueline	52	Clinton	
Friedman, Howard	Ps g		606 Chandler
Friedmann, Eric Martin	52		104 Providence
Frodigh, Roland John	52		29 Quinapoxet Lane
Gadomski, Stanley John	53	Clinton	
Gagne, Robert Pickering	53	Andover	Estabrook Hall
Galipeau, Raymond Philip	52		1060 Pleasant
Gallagher, Mary June	50		17 Wachusett
Gammal, Albert Abraham	52		11 Hawkins
Garbose, Samuel Bernard	51	Gardner	36 Richards
Gardner, George Duncan	52		37 Dean
Gaskins, Saretha	Ec S	Baltimore, Md.	4 Palmer
Gates, Ralph Lawrence	50		58 West
Gauthier, Kenneth Paul	52	Shrewsbury	
Gay, Clifford Clyde	50	Leicester	
*Gay, Frederick John, Jr.	50		66 Dorchester
Gendreau, Robert Henry	52	Spencer	
Gendron, Lillian Louise	50	Southbridge	Blakeslee Hall
George, Victor Ferris	53		269 Hamilton
Gibbs, Richard Warren	51		119 Monadnock Rd.
*Gifford, Raymond Thornton, Jr.	52		49 Berwick
Gilbert, Richard Gordon	53	Auburn	
Giles, Wesley Reginald	52		7 Hawthorne
Gillson, George Edward	50		51 Richmond Ave.
Ginsburg, Elizabeth Asher	53		11 Brantwood Rd.
Giobellina, Mary Angela	50	West Boylston	
Giuffrida, Matthew Roland	52		197 Belmont
Givan, James Alexander, Jr.	53		318 Highland
Goddard, Esther Christine	H g		1 Tallawanda Dr.
*Gold, Julius Sherman	50	Bridgeport, Conn.	8 Norwood
Goldberg, David Harold	50	Colchester, Conn.	14 Oberlin
Goldberg, Norma Josephine	52		44 Westfield
Goldfaden, Allen Robert	50	Norwich, Conn.	14 Oberlin
Goldman, Martin	50	Boston	
Goldstein, Arthur	51		5 Van
Goldstein, Edward Martin	50	Brookline	995 Main
Gollin, Eugene Simon	Ps TF	L’ng Isl’nd City, N.Y.	42 Freeland
Golumbuk, Leon Hersch	51		53 Midland
Goodale, Paul Alan	52	Leominster	
Goodell, Robert Proctor, Jr.	50	Shrewsbury	
Goodlight, Edward Thomas, Jr.	51		187 Delmont Ave.
Gordon, Walter Kelly	50	Brooklyn, N. Y.	23 Gardner
Gorrell, Robert Bryce	Ps g	Sterling Junction	
Goss, Edward Charles	52	Fishers Is., N. Y.	30 Hollywood
Gould, Loren Nelson	53		17 Darby
Graden, Harold Ragnar	51		16 Paul
Grader, George Wilson, Jr.	50	Marblehead	11 Highland Ter.

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Graf, Robert Edmond	52	Southbridge	8 Silver
Graham, Richard Henry	50		33 Wildwood Ave.
Graham, Russell Arthur	50		46 Oread
Granger, Wilfred Richard	Ed g		4 Raleigh Rd.
Graves, Pauline Elizabeth	51	Woronoco	Blakeslee Hall
Gravin, Laurence Alan	51	Rochester, N. Y.	51 Downing
Gray, Patricia Burritt	52	Plainfield, N. J.	Blakeslee Hall
*Graziani, Frank Robert	51	New York, N. Y.	40 Richards
Greene, Howard Herman	53	Millbury	
Greenlaw, Robert Wilson, Jr.	52		14 Oread
Greenwald, Aubrey	52		18 Healy Rd.
Grotewold, Andreas Peter	G S	Huntington, N. Y.	Y.M.C.A., 766 Main St.
Grove, Richard Irving	50		4 Lakeside Ave.
Grundberg, Cedric BoGunnar	53	Stockholm, Sweden	4 Westfield
Gullberg, Marjorie Annette	53		789 Grove
*Gunther, Kenneth William	50	Rochester, N. Y.	50 Woodland
*Gurney, Fred Victor, Jr.	51	Amesbury	35 Maywood
Gurwitz, Arnold	53		151 Providence
Gustafson, Pauline Marilyn	53		29 Woods Ave
Gustafson, Richard Lyman	52		151 Murray Ave.
*Gustafson, Russell John	Ec g		32 Kosta
Guy, Robert Woods	51		527 Salisbury
Gwynne, Nettie Thayer	Aud		12 Ivanhoe Rd.
Haberman, Elaine Lois	53		33 Hadwen Lane
Hackett, Charles Edward, Jr.	53	Springfield	Estabrook Hall
Haddad, Theodore Abraham	51		2 Dartmouth
Haefner, Don Paul	52	Albany, N. Y.	32 Oberlin
Haidukiewicz, Phyllis Evelyn	53	Gardner	Woodland Hall
Haigh, Barton	50		242 Burncoat
Hainsworth, Douglas Phillip	53		11 Wild Rose Ave.
†Hair, William Addison	Ec s		62 Moore Ave.
Halkyard, Neil Washington	G g	Boylston	
*Halpern, Seymour	B g	New York, N. Y.	12 Stockton
*Hammond, Alfred Stearns	En s		11 Lansing Ave.
Hanley, Edward Anderson	51	Monson	Estabrook Hall
Hanson, Eric John	Ec F	Alberta, Can.	16 Stoneland Rd.
Harackiewicz, Vincent John	M s	Winchendon	6 Wyman
Haroian, Mary	Ps g		43 Laurel
Haroian, Pearl	50	Clinton	
Harries, David Lyndon	Ps g	Ocean Grove, N. J.	2 Isabella
Harris, William Eldon	G s		28 Clifton
Haskins, Nancy Chandler	51	Hanover	Blakeslee Hall
Haslam, Beverly	53	Edgewood, R. I.	Fanning Hall
Hausrath, William Frederic	53		14 Hudson
Haworth, Herbert Arthur	50	Dalton	Estabrook Hall
Hayhow, Ernest Herbert	51		42 Shattuck
Heckman, Warren Keith	50		508 Grove
Hedenburg, Kenneth Bruce	51		236 Beverly Rd.
Hefner, Ruth Marie	51	Southbridge	
Hegvig, Virginia May	52		9 Frank
Hemenway, Paul Church	51		775 Pleasant
Hemmendinger, Larry	Ps g	Hillside, N. J.	875 Main
Herman, Alan Joseph	53	Bronx, N. Y.	Estabrook Hall
Heroian, Sharkey	50		165 Dewey
Hessen, Willard Carl	G g	Two Harbors, Minn.	38 Benefit
*Heywood, Gwenna Mae	H s		40 Massachusetts Ave.
Hicks, Walter Braxton	50		114 June
*Hifny, Mohamed Bahy	G g	Guiza, Egypt	81 Florence
Higgins, Nancy Marie	50		151 Morningside Rd.
Hightaian, Louise	53		104 Burncoat
Hilborn, Elizabeth Ann	50	New York, N. Y.	Woodland Hall
Hill, Barbara Ann	52	Southboro	Blakeslee Hall
Hill, Jeanne Phyllis	50		731 Pleasant
Hill, Joseph Allen	51	Albany, N. Y.	Quonset Hut
Hill, Lloyd Evan	53	Shrewsbury	
Hill, William Alexander	G g	Columbia, Mo.	7 Hawthorne
Hilmi, Nahida Rafig	52	Baghdad, Iraq	Woodland Hall
Hirschberg, Peter	G g		37 May

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Hirschberg, Yale Albert	52		89 Granite
Hobin, John Francis	Ed g		22 Fairhaven Rd.
Hofschire, Irja Rachel	Ed g		32 Forbes
Hohne, Russell Werner	51		28 Marconi Rd.
Hojnoski, George Thomas	53	Hatfield	10 Lamartine
Hokans, Corlyn Barnes	52	Westboro	
Hokans, David Hamlin	50		61 Everard
Hokanson, Leonard Ray	51		31 John
Holdroyd, Harriet Lucia	50	Spencer	Fanning Hall
Holloran, John Stephen, Jr.	51	Monroe, N. Y.	14 Oberlin
Holm, David Roland	51		69 Eagle Rd.
Holton, James Vernon	52	Houston, Texas	Estabrook Hall
Hopkins, Barbara Louise	53	Holden	
Horowitz, Samuel	50	Mattapan	23 Grand
Houle, Constance Madeline	52		94 Richmond Ave.
Houle, Paul Wendell	51	Gardner	16 Marble
†Howard, Irving Edward	H g		3 Homestead Ave.
Howe, George Marvel	G TF	West Hartford, Conn.	48 Downing
Hug, Yolanda Agnes	53	Auburn	
Hulme, Jean Marshall	51	Framingham	
Hunsberger, Mary Jane	50	Middletown, Conn.	Woodland Hall
Hurwitz, Cecile Gloria	51		24 Colonial Rd.
Hurwitz, Irving	Ps F		604 W. Boylston
Hurwitz, Theodore Herbert	52		4 No. Woodford
Hutchinson, Mary Elizabeth	52	Clinton	
Hutchinson, Richard Charles	53	Sutton	
Iacobucci, Albert John	52	Clinton	
Iacovelli, Ruth Adeline	52	Sterling Junction	
Ingebretsen, Edward Martin	52	Crestwood, N. Y.	50 Woodland
Ireland, Harry Ottway	52	Danbury, Conn.	1 Oak
Jackson, Priscilla Rosalie	51		89 Eunice Ave.
Jacobs, Charles Henry	52	Old Hickory, Tenn.	27 King
Jacobson, Harold Waldeman	52		63 Main
Jandron, Roland Leo	52	No. Oxford	
Javery, Milton Henry	50		72 Salem
Jenness, John Lewis	G F	Ottawa, Can.	9 Clifton
Jennings, Stephen Lester	52	Bethesda, Md.	16 Marble
Jerome, Kathryn Ann	Ed g		28 Circuit Ave.
Jigarjian, Harold Charles	52	Whitinsville	
†John, Thomas	53	Camden, N. J.	40 Richards
†Johnson, Arne Jacob	53	Fitchburg	
Johnson, Betty Ellen	51	North Grafton	Blakeslee Hall
Johnson, Emil Luther	50	Lottefors, Sweden	16 Everard
Johnson, Margery Ruth	H S		96 Woodland
Johnson, Marjorie	53		2 Forestdale Rd.
Johnson, Robert Earl	50	Southbridge	
*Johnston, John MacKenzie, Jr.	50	Leicester	
Johnston, Norman	52	Spencer	
Johnston, Sally Davies	51	West Boylston	Woodland Hall
Johnston, William Howard	51	Spencer	
Johnstone, John Oliver	51	Holden	
Jones, Francis Leland	H F		144 June
Jones, Louis Allman	50	Ashburnham	35 Maywood
Jones, Margaret Elizabeth	51	Southbridge	305 Belmont
Jones, Mary Kathryn	51	Southbridge	Westboro State Hosp.
Joynt, Carey Bonthron	H TF	Ontario, Can.	94 Lakewood
Jungmann, Henry	53	New York, N. Y.	Estabrook Hall
Justice, George Warren, Jr.	50	Woburn	
Kachadorian, Harry	50		41 Jacques Ave.
Kalem, Eleanor Merrill	53	Wamesit	Woodland Hall
Kalil, Eli	50		269 Fairmont Ave.
Kalil, Raymond	50		119 Hamilton
Kalin, Robert	51	W. Hartford, Conn.	51 Downing
Kaloosdian, Robert Aram	52	Watertown	923 Main
Kamandulis, Donald Algerd	52		10 Strathmore Rd.
Kane, William Francis, Jr.	51	Marlboro	

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Kant, Rena Susan	51	Shrewsbury	
Kaplan, Bernard	Ps g		875 Main
Kaplan, Edith Freund	Ps g	Brooklyn, N. Y.	875 Main
Karagheusian, Paul	52		18 Laurel
Karaku, Demeter Theodore	53		43 Abbott
Kasabian, Robert John	52		38 Terrace Dr.
Katz, Ruth Marion	52		1A Agawam
Kaufman, Stephen Lloyd	51	New York, N. Y.	36 Richards
Kelland, Frank Sydney	51	Keene, N. H.	26 King
Kelleher, Geraldine Mary	52		163 Mayfield
Kelleher, Noeline Ann	52	Boylston	
Kelley, Donald Lapan	52		24 Newbury
Kellogg, David Hodgkins	G g	Springfield	34 Gates
Kelly, James Antony, Jr.	50	Leicester	
Kemp, Betty Mary	50		552 Chandler
Kennedy, Edward Aloysius, Jr.	Ps g		41 Davidson Rd.
Kennedy, Louise Marie	51	Auburn	
Kerber, Raleigh Burton	52	Leicester	
Keyes, Robert James	50		52 Gardner
Kiewiet de Jonge, Engbert Jan Coen	G F	The Hague, Neth.	6 Downing
Kiewra, Stanley Francis	51		8 Hillside
Kinch, Frederick Joseph, Jr.	53		20 Whitman Rd.
King, Bettye Mary	51	Spencer	
King, Robert Edward	52	Leicester	
Kirby, John Redmond	52	So. Portland, Me.	Estabrook Hall
Kirby, Robert William	51	So. Portland, Me.	107 Illinois
Kistler, Walter Amandus	53	West Boylston	
Klainer, Stanley Melvin	53	Chestnut Hill	
Kneeland, David John	Ed g		105 Pleasant
Knight, Nancy Anne	53	Sturbridge	Fanning Hall
Knoth, Ronald Charles	53	Irvington, N. J.	Estabrook Hall
*Korzun, Sophiamarie Roberta	50		83 Penn Ave.
Kosak, George	52	Upton	
†Kosakowski, John Stanley	52		9 Upsala
Kosciusko, Theresa Christine	51		368 Greenwood
Koskinas, Liberty Catherine	51		61 Providence
Koutsoubas, George William	53		10 Newton Ave.
Kowal, Edna Elizabeth	50		6 Lisbon
*Krafft, Edwin Washington	G g	Springfield	
Kramer, Herman Harry	52		1 Marston Way
Krochalis, Anthony Vitie	51		29 Kosta
*Kubacki, Teresa Caroline	52	Arlington, N. J.	Fanning Hall
*Kuniholm, Harold Heinrichs	B s	Gardner	
Labovites, Costas James	52		82 Clayton
Lacouture, Alphonse Leon, Jr.	52	Millbury	
Laine, Oliver Herman	G g	Harrisburg, Penn.	11 Wheeler Rd., No. Grafton
Laipson, Samuel Mayer	51		5 Farnum Ter.
Lalor, Pierce Christopher	G g	Framingham	38 Benefit
Lamb, Bert Woodworth, II	52	Schoharie, N. Y.	8 Silver
Lamberto, Dominic	H g	Clinton	
*Lambros, Nicholas	51	Clinton	
Lamport, Marjorie Roth	50	Southbridge	
Lancey, Robert Alan	51	West Townsend	16 Marble
Lane, John Everett	Ps g	Shrewsbury	Box 57, Worcester
La Pierre, Richard Alan	52	Gardner	8 Silver
La Porte, George Wilfred	52	Ayer	
Larava, Ann Teresa	53		40 Kingsbury
Larson, Alden Alfred	Ed g	Concord	
Larson, Jane Louise	53		38 Stebbins
Laska, George	50		13 Converse
Lategola, Michael Thomas	B g		41 Coburn Ave.
Lawson, Hugh Harold	52	Warwick	50 Woodland
*Leary, William Bray	53		6 Surrey Lane
Leavitt, Phillip Arthur	52	New York, N. Y.	Estabrook Hall
LeBeau, Raoul Joseph	53	Spencer	

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
LeBlanc, Beatrice Yolande	50	Gardner	Woodland Hall
LeClair, Edward Emile, Jr.	Ec TF	Southbridge	
LeClaire, Robert Lawrence	51	Millbury	
Lee, Harold James	51	New York, N. Y.	59 Maywood
Lee, William John	51		1 Norwood
†Legg, Willard Allen	51		2 Davidson Rd.
*Lemire, Marie Ernestine	50		20 Gates
Lennan, Geoffrey Wendell	50		65 Brantwood Rd.
Lenti, Frank Michael	G g		525 Grafton
†Leonard, Ralph Anthony	Ed g	N. Brookfield	
Leonard, Robert Martin	51	Shrewsbury	
Leonard, Robert Winslow	Ps S	Waban	
*Lepeisha, William Vincent	G s		19 Epworth
Lerner, Robert Martin	Phil s	Shrewsbury	
Leslie, John Charles	51		93 May
Liberty, Kenneth Earl	50	No. Uxbridge	
Lilley, John Robert, II	50		127 So. Ludlow
Lindberg, Marjorie Christine	50	Leicester	
Lindholm, Alf Birger	53		54 Everard
Linsley, Betty May	H S	Branford, Conn.	24 Gates
Lipton, Herbert	Ps g	Roselle Park, N. J.	17 Oberlin
Listewnik, Henry Vincent	51		407 June
Litalien, Joseph Gerard	51	Leominster	
Little, Dana Anton	G g	Brunswick, Me.	10 Lowell
Lockhart, John	52		8 Quincy
Lofchie, Stanley Harold	Ps S		12a Harvard
Loomer, Sumner Wellington	51	Shrewsbury	
Lonstein, Alfred Irving	52		35 Tirrell
Lord, Mary Elizabeth	52	Auburn	
Loweth, Gerald Philip	50	Norwich, Conn.	13 Gates
Lowney, Gerald Mansfield	53		50 Barclay
Lund, Robert Edward	51	Portchester, N. Y.	13 Gates
Lurier, Janice Evelyn	50		231 Park Ave.
Lurier, Norman Merrill	51		231 Park Ave.
Lynch, Jean Mary	51		95 Fairfield
MacCarthy, Ann Kathleen	53		95 Commodore Rd.
Macchi, Italo Alden	B g		37 Anderson Ave.
Macdonald, John Atwood Ross	Ec S	Ontario, Can.	18 Shepard
MacDowell, George Ferno	Ec g	P. E. Is., Can.	875 Main
MacFadyen, Fred Simms	52	Kearny, N. J.	50 Woodland
MacFarland, Jameson David	51		182 Millbrook
*MacGillivray, George Charles	G g	Arlington	144 Maywood
MacGilvra, Bruce Ronald	52		15 Monadnock Rd.
Macintyre, Jean Warren	51		4 Davidson Rd.
Maghak, Noel John	53	Baghdad, Iraq.	Estabrook Hall
Mahoney, James Martin	H TF	New Haven, Conn.	5 Ferdinand
Mahoney, Joseph Peter	50		9 Greendale Ave.
†Makowiecki, Micheal Marian	52		3 Hillside
*Majeed, Abdul Amir	G g	Baghdad, Iraq.	893 Main
Manduca, Dominic Anthony	51	Cherry Valley	
Mangan, Nadine Helen	Ed g		102 Piedmont
Mann, June Lorraine	51	Turners Falls	10 Brewster Rd.
Manning, Grace Anne	53		1 Rosemont Rd.
Manoog, John Charles	53		70 June
Mansfield, Robert William	52		6 Briarcliff Rd.
Manter, Gloria Inez	G S	Chevy Chase, Md.	24 Gates
Manzi, Dolores Maria	50	Webster	
Manzi, Lucian Arthur	50	Shrewsbury	
Marcus, Gerald Golden	52		5 Havelock Rd.
Marion, Raymond Joseph	H g	Spencer	
Marsella, Robert Anthony	51		38 Ayrshire Rd.
Marshall, John Francis	51	Brooklyn, N. Y.	Quonset Hut
Marsoopian, Anita	50	Whitinsville	
Martel, Norman Albert	53	Webster	
Martel, Raymond Joseph	50		10 Dallas
Martel, Robert William	50	Webster	
Martin, Anna Mae	Ch TF	Springfield	52 High
Martin, Richard Raymond	53		49 Ascadilla Rd.

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Martus, Joseph Armand	Ch S		Holy Cross College
Mastroberti, Rocci Stephen	50		38 Superior Rd.
Mayhew, Irma Joyce	52	Vineyard Haven	Blakeslee Hall
Maynard, Julius Pearl	51	Central Square, N. Y.	765 Main
Maynard, William Snyder	52	Fishers Island, N. Y.	100 Woodland
Mazur, Anne Regine	50		42 Perry Ave.
*McCarty, Margaret Ann	Ed g	Clinton	
McCauley, Donald Frederick	50		509 Burncoat
McConnell, Robert Charles	53		162 Harding
McCourt, James Carson	52		66 Greenhill Parkway
McDonough, Anna Theresa	53		9 Holland Rd.
†McGachie, Harry Leo	51	Jamaica Plain	8 Clifton
McGee, Fewer Edmund	Ed g		41 Birch
McGrath, Anna Nichols	51	Marlboro	
McGrath, Dorothy Bernardine	53		583 Cambridge
McGrath, Marshall Conrad	51	Rochester, N. H.	16 Marble
McIntyre, Wallace Edward	G TF	Leicester	
McLean, William Andrew	51		29 Westfield
McNulty, James Martin	52		89 Lakewood
Mee, John Courtney	52	Framingham	
Mei, Yi-Chao	53		32 Buckley Rd.
Meissner, Philip George	51	Little Neck, N. Y.	40 Richards
Mendelsohn, Joseph Meyer	52	Revere	
Mellin, Alan Gilman	51	Melrose	16 Marble
Meskunas, John Peter	52	Waterbury, Conn.	Estabrook Hall
*Metaxas, Peter Angelos	53	Athens, Greece	Estabrook Hall
*Metras, Pauline Exena	Ch s	Southbridge	
Michaelian, Peter Andrew	52		179 Belmont
Michniewicz, Joseph Anthony	53		8 Richland
Mikoloski, Vincent Stanley, Jr.	50		25 Rob Roy Rd.
Miller, Lois Marian	53		18 Dellwood Rd.
†Milne, Walter Ling	Ed g	W. Boylston	
Milton, Barbara Anne	53		151 Brookline
Minasian, Minas	52		22 Hawley
†Mindick, Arnold David	52		67 Richmond Ave.
Mirin, Bernard	Ps g	Brooklyn, N. Y.	42 Freeland
Mitchell, Mary Patricia	52	Gilbertville	
Modlinger, Ralph Elmer	B g		127 Highland
Mohr, Tom Leopold	51	New York, N. Y.	7 Kilby
Mollineaux, James Arthur	53	North Quincy	Estabrook Hall
Mollo, Constantine D.	50		20 Millbrook
Mondore, Edward	51	Albany, N. Y.	100 Woodland
Mongeon, Norma Joyce	51	Millbury	
Mongilio, Robert Anthony	52	Millbury	
Monkiewicz, Wojciech	G g	Oakdale	
*Monks, Norman Joseph	En s		102 Wildwood Ave.
Mooradkanian, Edward	52	North Andover	40 Richards
Morant, Ricardo Bernard	Ps g	New Britain, Conn.	4 Thayer Court
Moreland, Andrew Smith	G g	Atlantic City, N. J.	36 Cedar
Morello, Robert Angelo	51		6 Norfolk
Morey, Howard Ralph	53	Oxford	
Morin, Gerald Joseph	Ed g	Fisherville	
Morrison, Daniel Joseph	52		104 Darrow
†Morse, Jon Carol	52	No. Wilbraham	No. Brookfield
Mrosek, George Ernest	52	Manchester, Conn.	13 Gates
Mueller, Gilbert Francis	Ec S	Springfield	511 Park Ave.
Muir, Jeanne Viola	50		301 Burncoat
Mulligan, William Dunning	51		33 Gifford Dr.
Mulvey, Philip Francis, Jr.	53		130 Fairmont Ave.
Murphy, Ann Marie	51		220 Lovell
Murphy, Cornelius Bernard	Ch g		37 Enfield
Murphy, Earle Edwards	Ps g	New London, Conn.	4 Mt. Pleasant
Murphy, Paul Florence	50		56 Orange
Murray, Leroy Joseph	51	Northampton	85 Salisbury
Myers, Wallace Haslett	51		3 Old English Rd.
*Narcus, Harold	Ch S		15 Vesper
Nasse, Alyne May	52	Southbridge	
Nasse, George Nicholas	52	Southbridge	

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Navaroli, John Anthony	53	Clinton	
Nazarow, John Peter	52	Gardner	
Neary, Beatrice Loretta	50		193 Park Ave.
Neiditz, Marvin Myer	52	Hartford, Conn.	36 Richards
Nelson, Betty Louise	51		33 Gosnold
Nelson, Richard Andrew	53		45 Uncatena Ave.
Nelson, Roy Stanley	51	Holden	
Nelson, Thomas Leverett	51	Northboro	3 Hancock
Nester, Chloe Adele	53		14 West Chester
Niarchos, Constantine Thomas	50	Pittsfield	919 Main
Niarchos, Peter Thomas	50	Pittsfield	919 Main
Nicholas, Violette	52		17 Goulding
Nicholas, Virginia	51		17 Goulding
*Nichols, Arthur Wilder, Jr.,	50		178 Lincoln
Nichols, Frank	51	Philadelphia, Pa.	Estabrook Hall
Nichols, Norton, Jr.	G g	Ontario, Calif.	1 Astor Place
Nicola, James	51	Bridgeport, Conn.	Quonset Hut
Nierendorf, Roy Arthur	Ps g		9 Stoneland Rd.
Nimmo, John	51	L. I. City, N. Y.	95 Lakewood
Noble, Ralph Everett	52	Whitinsville	
Nolin, Emile Francis	50	North Agawam	35 Maywood
Noniewicz, Stanley John	51	New Britain, Conn.	Quonset Hut
Nordwell, Clifford Irving	52	Shrewsbury	
Norman, Albert	H g		8 Flagg
Norman, Gerald Earl	53		38 Dellwood Rd.
Norris, Lois Janet	51	Charlton	
†Norton, James Arthur, Jr.	Ed g		1397 Main
Norton, John Ernest, Jr.	50		11 Duxbury Rd.
Norwood, Richard Denton	53	Rowayton, Conn.	Estabrook Hall
Norwood, Robert Griffin, Jr.	53	Rowayton, Conn.	Estabrook Hall
Novakoski, Edward Anthony	52		246 Vernon
Novick, William John	53		4 Chapin
Novitch, Richard Leonard	52	Marlboro	
Nylin, Marilyn Bernadine	53		119 Airlie
Obremski, Edward	50		11 Dorchester
O'Brien, Paul Vincent, Jr.	53	Wheelwright	
O'Connell, John Joseph	52	Westboro	
*O'Connor, Lawrence Stephen	50		3 Norwood
O'Donnell, Albert Burke, Jr.	52	Shrewsbury	
Ogilvie, Bruce Crossan	G g	So. Portland, Me.	West Sterling
O'Grady, Margaret Rita	51		2 Pelham
O'Leary, Robert Edward	En s		262 Chandler
Olson, Albin Raymond	53		156 Mayfield
Olson, Benedict Oliver	50		3 Ridgewood Rd.
O'Neill, Alan Edward	51	Farnumsville	
Oravainen, Lauri Olavi	Ed g	Alatornio, Finland	32 Kinnicutt Rd.
Orman, Sidney Bernard	50		53 Howland Ter.
Osgood, Samuel Maurice	H g	Elko, Nevada	39 School, Northboro
Ostergaard, Robert Alden	52	North Grafton	
Oswell, David Dill	51		370 Lovell
O'Toole, Charles Stuart	51	Leominster	35 Maywood
Owens, John James, Jr.	50	New Bedford	52 Woodland
Pacek, Walter John	51		1 Pitt
Palano, Joseph Thomas	Ed g	South Barre	
Palmer, Islay Isabelle	50	Southbridge	Woodland Hall
Pappas, Charles	50	Webster	
Pappas, Ernest James	51	Webster	Quonset Hut
Pappas, Steve Charles	53	Southbridge	Estabrook Hall
Paquette, Ernest Girard	51	West Newton	40 Richards
Parda, Stanley Chester	53		2 Bigelow
Parker, Fred Walter	50		1194 Main
Parmenter, Guy Norris	G g	Santa Monica, Cal.	20 Gates
Parsley, Elaine June	53		360 Mill
Patronas, Eleas William	51		59 Dorchester
Patterson, Janet Ann	52		17 Rockdale
Patterson, Wayne Everett	53	Attleboro	Estabrook Hall
Pawlikowski, Daniel Felix	51		17 Hammond

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
*Peirce, Kenneth Leigh	53	Berlin	17 Hammond
Pentland, Robert Howard	51		178 June
Perkins, Shirley May	50	Boston	Fanning Hall
Perron, Richard Waldo	52		197 Delmont Ave.
Peters, Donald Daniel	53		340 Hamilton
Peterson, Paul Norman	51		15 Lorenz
Peterson, Robert Andrew	53		141 Eastern Ave.
Petka, Stanley Michael	51	Wilkinsonville	
Petrakogeorges, Heraklis	52	Clinton	156 Woodland
Petrell, Edward Francis	52	Rockland	Estabrook Hall
Petrell, Ralph Joseph	52	Rockland	Estabrook Hall
Phelps, Charles Foskett	51		7 Ruth
Phillips, Albert George, Jr.	50	Audubon, N. J.	1003 Main, Leicester
Phipps, Clarence Ray	50	Upton	
Phoenix, Ernest Gerard	53	Troy, N. Y.	18 Canna Dr., Shrewsbury
*Pierce, Frederick Gunner	51		15 Chatham Pl.
Pignataro, Francis Xavier	53		23 Suffolk
Pinna, Sanford	53	Cleveland, Ohio	Estabrook Hall
Piper, Barbara Ruth	50	Leominster	21 Bowdoin
Plucinski, Robert Paul	51		7 Firglade
Plummer, Beverly Anne	53	Monmouth, Me.	23 Mayfair
Plummer, Franklin Pierce	50	Harrisburg, Pa.	8 Clifton
Polastri, Joseph Eugene	50	Branford, Conn.	100 Woodland
Pollack, Robert Harvey	Ps g		160 Highland
Polymeros, John Constantine	53	Clinton	
Pongowski, Florence Josephine	51		83 Ward
Ponty, Louise Dolores	52		129 June
Porton, Marjorie June	50		373 May
Proctor, Patricia Woodbury	G g	Northboro	
Proctor, Robert Merton	50		1342 Pleasant
Proodian, Valerie Mary	51		25 King
Prouty, Etta Frances	Ed g	Shrewsbury	
Putnam, George Clinton	52		53 Navasota Ave.
Radzik, Rose Marie	53		136 Endicott
Raffa, Romolo Louis	50		10 Carver
Rafkin, Myron David	52	Quincy	Quonset Hut
Ragoza, Stanley	52	Leeds	16 Marble
Randall, Lawrence Edward	G g	Framingham	26 Gates
Rassias, Charles Nicholas	51		20 Hackfield Rd.
†Rawda, Khalida	G g	Baghdad, Iraq	6 Chatham
Reed, Richard William	Ec g		325 Lovell
Rees, David William	Ec g	Tacoma, Wash.	60 Downing
*Reilly, Joseph Leo	51		37 Clifton
Renaud, Walter Joseph	53	Cherry Valley	
*Rennard, Christine Mathilde	RL s	So. Lancaster	
Reycroft, David Gage	M s	Arlington	19 Harvard
Rice, Thomas Frederick	53	Buzzards Bay	Estabrook Hall
Richards, Gerald Owen	51	Rockport, Me.	16 Marble
Richardson, Norman James	52	Braintree	Estabrook Hall
Richason, George Robert	Ch g	Amherst	
*Rickard, William Jack	52		605 Millbury
Rickles, Estelle Barbara	FA s		53 Walworth
Riemenschneider, Robert Eugene	50	Culver, Ind.	86 Woodland
Rimbach, Marcella Deighton	53	Sterling	Fanning Hall
Riordan, James Francis	51		106 Richmond Ave.
Ritter, Gerald	Ed g	Lowell	74 Florence
Roche, Claire Maureen	52		493 Park Ave.
Rodenstein, Lois Marion	52	Roxbury	Woodland Hall
*Rogers, Morrison Omer	52	White River Jct., Vt.	Estabrook Hall
Rolston, Glenn Everett, Jr.	50		7 Kilby
Römer, Clara	G F	Leeuwarden, Holland	11 Flagg
Rondinella, Renato Mario	51	Brooklyn, N. Y.	20 Gates
Rose, Barbara Elizabeth	52	Watertown, Conn.	Woodland Hall
Rosenbaum, Joseph Hans	Ch g	Lowell	53 Charlotte
*Rosenblatt, Bernard Philip	Ps g	Concord, N. H.	871 Main
Rosenblatt, Melvin Morton	52		38 Woodford
*Ross, Harmona Ferelith	Ps F	Dorchester	

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Rothblatt, Helaine Lois	52	Brookline	Fanning Hall
Rubin, Marc Sheldon	50	New Haven, Conn.	36 Richards
Russell, Henry Nelson	50		76 Mill
Russell, Margaret Mary	Ed g	Millbury	
Russell, Robert Earle	Ch TF	Springfield	78 Hollis
Ryan, James Grogan	52	Springfield	Estabrook Hall
Ryan, John Walter, Jr.	52	Shrewsbury	
Sachs, Howard Miller	52	Bridgeport, Conn.	Estabrook Hall
Sadick, Phyllis Muriel	50		10 Lenox
Sadowsky, Joan Carol	51		42 Commodore Rd.
*Sagerian, Mesack Harry	52		103 Austin
Salem, Emil John	51		31 Wall
Salem, William John	52		394 Grafton
Salvatelli, Geno Francis	51	Leominster	20 Gates
Sandberg, Richard Paul	50, Ed g		62 Whipple
Sanford, Frederick Shelton	G g	Ansonia, Conn.	62 High
Sanford, William Warren	B g	Starrucca, Pa.	664 Pleasant
Sarando, Lucy Emerald	50		12 Page
Sardo, Peter T.	G g	Laureldale, Pa.	455 Park Ave.
Sawyer, David Erickson	51		18 Huntington Ave.
Sawyer, Ruth Muriel	52		18 Huntington Ave.
Scannell, Marguerite Ann	52		4 Judson Rd.
Schaines, Nancy Sara	53	New York, N. Y.	Woodland Hall
Schalck, Harry George	H g	Reading, Pa.	6 Shepard
Schneider, Charles	52	New York, N. Y.	Estabrook Hall
Schollard, William James, Jr.	52		83 Florence
Schuman, Robert Laver	51	Hyannis	21 May
Schuster, Gerald	51	Brookline	40 Richards
Scola, Daniel Anthony	52		21 Branch
Sears, Noel Chase	51		11 Dunbar
Seaver, Ralph Adelbert, Jr.	52		12 Wellington
Seay, Claire Lorraine	51		32 Ames
Seder, Ivan Ellis	52		6 Zenith Drive
*Seipp, Anne Breen	52	Putnam, Conn.	
Selzo, Joseph Robert	50		115 Ingleside Ave.
†Senecal, Alfred Henry	Phs s		82A Pleasant
Shankman, Sylvia Betty	53		15 Somerset
Shapiro, Elsa Lee	53		35 Brantwood Rd.
Shatikian, Khachatoor	51	Teheran, Iran	247 Park Ave.
Shear, James Algan	G TF	Pittsburgh, Pa.	14 Blaine Ave.
Shenian, Popkin	50	Whitinsville	
Shepard, William Davis	Ec g	Oxford, N. C.	4 Pelham
Sheppard, Frederick Neil	51		5 West Oberlin
Shepro, David	B g		7 Kilby
Sher, Esther Frances	53		235 Cohasset
Sherman, William Andrew	50		6 Malden Ter.
Sherry, Dudley Benson	51	Whitinsville	
Shiminski, Joan Mary	51		1036 Main
Shiminski, Paul Anthony	50		1036 Main
Shih, Li-chang	G S	Changsha, China	25 Woodbine
Shippee, Barbara Lucille	51	Sturbridge	
†Showket, Ibrahim	G g	Baghdad, Iraq	82 Lovell
†Showket, Subhia Mikdadi	52	Baghdad, Iraq	82 Lovell
Shulman, Kenneth	50		168 June
Sibley, William Frederick	50	West Springfield	16 Marble
Sigel, Morton Herbert	51		94 Houghton
Siegel, Edward Louis	Ps g		34 Catherine
Simmons, Clark William	H TF	Cooperstown, N. Y.	171 Woodland
Simon, Walter Benno	Ps g	New York, N. Y.	128 Beaver Brook Pkwy.
Simonian, Harry	52	Whitinsville	
Simpson, Dorothy Louise	51	West Boylston	
Sirk, Joel Hayden	50		15 Vassar
Sisson, Robert Eugene	52		75-6 Park Ave.
Skinner, Marguerite MacPherson	50		98 Forest
Skogstrom, Paul Robert	50		63 Eunice Ave.
Slechta, Robert Frank	B g		25 Delawanda Dr.
Sleuman, Frank Henry, Jr.			3 Oliver
*Slimmon, James Barnett, Jr.	51	W. Hartford, Conn.	40 Richards

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Smith, Ann Marie	50		70 Coolidge Rd.
Smith, Arthur Joseph	52		101 Merrick
Smith, Arthur Wallace	50		26 Dale
Smith, Charles Francis, Jr.	51		81 Piedmont
Smith, Delwin Frank	51	Newtonville	1044 Main
Smith, Ian Ballantyne	51		75 Catherine
Smith, Laurence Graves	53	Princeton	
Smith, Margaret Augusta	52		70 Coolidge Rd.
*Smith, Nancy Southwick	52	Sutton	
Smith, Raymond Rodolphe	52	Westboro	
Smith, Reginald Joseph	Ec g		201 St. Nicholas Ave.
Smith, Robert MacNaught	51	No. Grafton	
Soderberg, Barbara Arlene	50	19 Breck—Worcester	Woodland Hall
Sokoloff, Janet Sharp	50	New Haven, Conn.	Blakeslee Hall
Solomon, Paul	Ps g	Brighton	
Somers, Robert Charles	52		183 Ballard
Sorvo, Paul John	53	Millbury	
Southwick, Miriam Katherine	Ps g	Meriden, Conn.	14 Sycamore
Spalding, Judson Wylder	50		717 Southbridge
Spaulding, Arvin Arthur	53	Lancaster	
Spaunburgh, Richard George	50		56 Copperfield Rd.
Spencer, Harry Irving, Jr.	50		740 Pleasant
Sperry, Herbert Stephen	50	West Boxford	19 Baker
Squier, Dean Firth	50	Jamestown, N. Y.	Worc. State Hospital
Stacey, Karl	G g	Manhattan, Kansas	23 Minthorne
*Stanhope, Beverly	53		20 Rich
Stanhope, Russell Herbert	50		20 Rich
*Stavros, Esther	51		37 Hudson
Sterns, Harlan Emory	52	Winchendon	Estabrook Hall
Steeves, Marilyn Joan	53	Gardner	Woodland Hall
Steinberg, Robert Malcolm	52	Norwalk, Conn.	Estabrook Hall
Steingold, Kenneth Harold	52	Pawtucket, R. I.	Estabrook Hall
Steininger, Marion Kay	Ps S	New York, N. Y.	24 Gates
Stern, Austin	53	Chestnut Hill	Estabrook Hall
Stevens, Donald Eberhardt	50	Branford, Conn.	E. Main, Oxford
Stewart, Milton	50		7 Winslow
Stickney Stanley Francis	51	Auburn	
Stolbof, Bernard	51	Albany, N. Y.	7 Kilby
Stolnacke, Richard Arthur	52		41 Tatman
Stone, George Levi	53	Princeton	
Stone, Henry Washington, Jr.	53	Oakham	
Stone, William Edward	Ed g		7 Schussler Rd.
Strandberg, Verner Raymond	52		1 Knapp Ave.
Stratton, David Kent	52	Maplewood, N. J.	16 Marble
Streeter, Delena Elizabeth	50		728 Burncoat
Strickland, Walter Robert	50	Fitchburg	
Sturtevant, Thomas Charles	50	Concord	Quonset Hut
†Sullivan, Donald William	52	Gilbertville	
Sullivan, Edward Patrick	50		466 Park Ave.
Sullivan, John Joseph	50	Lowell	23 Hollywood
Sullivan, Richard Patrick	52		14 Hitchcock Rd.
Sullivan, William Thomas	52	Braintree	26 Sever
Sumner, Joseph	51		34 Loxwood
Sund, Kenneth Albert	Ch TF		28 Rodney
*Sundquist, Gustaf Adolph, Jr.	52		104 Stanton
Supovitz, Irving Louis	50		34 Pattison
Sussman, Richard Fredric	53	Mt. Vernon, N. Y.	Estabrook Hall
Svenson, David Andrew	52		30 Button
Swana, Michael Richard	50	Dudley	
Swanstrom, John Eric	51		20 Neptune Rd.
Swanstrom, Kenneth Edwin	50		24 Holland Rd.
Symonds, Merrill Augustus	H g		98 Ararat
Symonowicz, Alfred Michael	53		49 Arlington
Szetela, Edward Robert	H g	Holyoke	10 Underwood
Szerlag, Genevieve Agnes	53	Northbridge	
Tashjian, Robert John	51	West Boylston	
Taylor, John Lewis	G g	Menlo Park, Cal.	245 Wildwood Ave.
†Taylor, Nancy	H S		51 Laconia Rd.
Taylor, Robert Earl	52		107 Whitmarsh Ave.

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Tenzer, Alice Betty	53	New York, N. Y.	Woodland Hall
Thayer, Constance	53	North Oxford	
Thayer, Nancy Ann	51	Shrewsbury	
Thomas, Daniel Walter	53		5 View
†Thompson, William Bruce	Ed g	Leominster	
Thornton, Frank William	H S	Bradford, England	10 Lowell
Thresher, Allan Avery	51	Wakefield	40 Richards
†Thurston, Anthony Warren	53	Swansea	111 Austin
Thurston, Roger Tucker	51		20 Juniper Rd.
*Thurston, Wayne Lovejoy	Ps g	Bangor, Me.	17 Isabella
Tibbetts, Raymond Eugene	51		77 Pine View Ave.
*Tigar, Burton Summer	52	Brighton	
Tillotson, Arline May	50		33 Lansing Ave.
Tillson, Robert Tyler	50		53 Morningside Rd.
Tite, Dorothy	Ed g	Charlton City	
Tomolonis, Albert Joseph	51		77 Beaconsfield Rd.
Toole, William Daniel	51	Vernon, N. J.	6 Shepard
Torres, Allan Francis	51	Brooklyn, N. Y.	40 Richards
Tosi, Joseph Andrew, Jr.	G g	Sterling	
Tosi, Peter Alexander	51	Sterling	
Tothill, William Robert	50	Hardwick	
Tromovitch, Theodore Albert	53		24 Orient
Trow, Warren Frank	50	Sterling	
Trudeau, Edmond Andrew	51	Webster	
Trussell, Barbara	50		41 Harvard
*Tucker, Jean Cashman	H g		9 Colonial Rd.
Tuckman, Harvey Mortimer	52	So. Norwalk, Conn.	36 Richards
*Tuller, Robert Ellison	BA s		5 Paul Revere Rd.
Turnbull, Elliot Dean	53	Clinton	
Tuttle, Roger James	53		125 Malvern Rd.
Twohey, Paul Francis	Ed g	Leicester	
Tyborowski, Joseph John	52		1 Granite
Ullstrom, Paul Edward	51		28 Victoria Ave.
Ungar, Judith Ann	53	Brooklyn, N. Y.	Woodland Hall
Vance, James Elmon, Jr.	G g	Natick	11 Charlotte
Vander Pyl, Adrian Weston	50	Rutland	
Vandersea, Mary Louise	51	Whitinsville	
Van Haagan, Robert Davis	53	Northboro	Estabrook Hall
Van Steenburgh, David Raymond	51	Framingham	10 Charlotte
Vickers, Harold Earl, Jr.	50		23 W. Boylston Dr.
Vienneau, Gerald Joseph	50		163 Dewey
Viglucci, Andrew Thomas	51	Albany, N. Y.	7 Kilby
Virchow, William Richard	Ed g	Needham	
Von der Heide, John Thomas	52	Scarsdale, N. Y.	16 Marble
Vouras, Paul	G g	Meriden, Conn.	32 Oberlin
Vradenburg, Joanne Patricia	50	Toledo, Ohio	Fanning Hall
Walker, George Francis	50	Spencer	
Washburn, Elaine	50		9 Congress
Waszkiewicz, Chester Stephen	H g		17 Candlewood
*Waterman, Irma	52	Attleboro	Woodland Hall
Watkins, Helen Eugenia	52		110 Barnard Rd.
Weagle, Ervin Eldred	50	Shrewsbury	
Weaver, Miles Waverly	50, G g	Spencer	
Webster, Charles Ellison	52	Whitinsville	
Weed, Amorette Grace	53		10 Walter
Wegrzynek, Richard Napoleon	Ed g		17 William
Weisberg, Leonard R.	50	New York, N. Y.	36 Richards
Welch, Francis Donald	52	Lynn	Estabrook Hall
Wells, Jacquelyn True	50	Leicester	Blakeslee Hall
Wells, Walter Edward	50	Dodge	
Westcott, Roger Temple	50	Belmont	16 Marble
Weston, Ray Faunce	51	Mobile, Ala.	Quonset Hut
Wetherbee, David Kenneth	50		11 Dallas
Wetmore, Clayton Andrew	51	Norwalk, Conn.	8 Clifton
Wetmore, Melvin Abram	51	Norwalk, Conn.	8 Clifton
Wheeler, David	52	Revere	59 Maywood
Wheeler, Diane Eleanor	53		14 Goulding

NAME	CLASSIFICATION	HOME ADDRESS	LOCAL ADDRESS
Wheeler, Doanda Risley	52		73 Sagamore Rd.
Wheeler, Dorothy Ann	53		14 Goulding
White, Richard Andrew	53	Leominster	
Whitney, Leon Edward Jr.	52	Athol	1046 Main
Wickstrom, Robert Walter	BA s		54 Holden
*Wiegand, Dudley Wheeler	50		224 Lovell
Wiener, James Saul	52		92 Houghton
Wiener, Norma	53		51 Richmond Ave.
Wikkramatileke, Rudolph	G S	Colombo, Ceylon	455 Park Ave.
Wile, Robert Pershing	En s		128 Stafford
Williams, Malcolm	Ed g		79-2 Park Ave.
Wilson, Mary Tewksbury	Ps g	Amsterdam, N. Y.	21 Fruit
*Winchester, John Francis	Ec s		26 Eunice Ave.
Woo, David Yu Cheng	51	Shanghai, China	86 Woodland
Woodhouse, Hilary Scott	G S	Hereford, England	16 Benefit
Woods, John Francis	51		102 Whitmarsh Ave.
Woolson, Gloria Dolores	50		6 Tahanto Rd.
Worth, Melvin Hersh	50	New York, N. Y.	36 Richards
Wortham, Alonzo William	53	Peekskill, N. Y.	Estabrook Hall
Wynne, William Mark	51	Manchester	10 Oliver
Xenos, Richard Anthony	50		34 Lincoln
Yakutis, Robert Kasimir	53		20 Crescent
Yoffe, Graenem Abba	51		59 South Lenox
Young, Manoog Solomon	H g	Brookline	6 Richards
Youngren, Betty Saunders	51		79 Lakewood
Zaharatos, Andrew John	50	New York, N. Y.	21 Shirley
Zecker, Benjamin Bernard	Ed g		16 Alpine
Zimavicius, Jurgita Constance	53		858 Main
Zitowitz, Lester	52		172 June
Zmyslowski, Walter Peter	52		28 Marion Ave.
Zuk, Henry	51	New York, N. Y.	16 Marble
Zukowski, Walter Henry	Ec TF		119 Morningside Rd.
Zukowsky, Raymond John			26 Julien Ave.

II. SUMMER TERM STUDENTS (1949).

An (*) indicates a student in residence for one session only.

*Achramowicz, Thaddeus F., Worcester
*Adams, Sylvia E., Uxbridge
Adams, Theodore F., Worcester
Adrian, Richard F., Westboro
Ahern, Thomas B., New Haven, Conn.
Ahlquist, Stanley W., Worcester
Alexander, Lewis M., East Dennis
Alperin, Bernard J., Worcester
Ambrosini, David M., Worcester
*Amidon, Dorothy A., Worcester
*Amsden, Festus G., Orange
Anderson, George W., Northboro
Anderson, John H., Shrewsbury
Anderson, John R., Worcester
*Anderson, Robert, Jr., Gambier, Ohio
Anderson, Roger B., Worcester
*Andreson, Irene, Worcester
Aramony, William, Worcester
Ardehali, Ali, Teheran, Iran
*Ash, Margaret M., Worcester
Ater, Ralph E., Toledo, Ohio
Atwell, Donald L., Sewickley, Pa.
*Aubuchon, Bernard W., Fitchburg

Babigian, Vasgen, Shrewsbury
Babineau, Alexis A., Worcester
Bachmann, Robert E., East Brookfield
*Bagley, Guy A., Petersham
Ballan, James E., Worcester
Banks, Donald A., Worcester
*Barber, George F., Worcester
Barnes, Clarence E., Auburn
*Barnett, Eileen, Worcester
*Barnicle, Robert J., Fairhaven
Barrett, James J., Jr., Worcester
Bartlett, Barbara A., Worcester
Bartlett, Mabel R., South Lancaster
*Bartley, Emily, Holden
Baskin, Myron A., Kenmore, N. Y.
Bastille, John G., Worcester
Baum, Bernard, Brookline
Baumgartner, Franklin W., Leominster
Beaudry, René P., Worcester
*Behan, Herbert G., Jr., Providence, R. I.
Belair, Donald P., Worcester
*Bennett, Gale W., Worcester
Berg, George M., Worcester
*Bergquist, Russell R., Worcester
Bernklow, Roger D., Thompson, Conn.
Berthiaume, Joseph O., Southbridge
Berthiaume, Raymond O., Worcester
*Bianchi, Dolores F., Worcester
Bilezerian, Oscar A., Worcester
*Blackburn, George F., Northboro
*Blais, Frederick W., West Stewartstown, N. H.
*Blanchard, Virginia A., Worcester
*Bond, Carl T., Bristol, N. H.
Bondra, George, Peekskill, N. Y.
Borkowski, Theresa R., Gardner
Bosworth, Russell H., Braintree
Boudreau, Florence A., Worcester
Bowler, Donald J., Worcester
*Boyden, Helen R., Worcester
*Bradford, Mildred S., Washington, D. C.
*Branagan, Francis C., Worcester
*Brandli, William T., Worcester
Bray, Charles A., Newton
*Brigham, Walter L., Northboro
Brogan, Keith S., Worcester
Brooks, Blossom S., Worcester
*Brooks, Harriet, Worcester
Brotherton, William R., Worcester
*Brousseau, Armand C., Fitchburg
*Brown, Bernice E., Grafton
Brown, Ellwood T., Grafton
Bruno, Arthur J., East Douglas
*Brunson, Grace E., Winston-Salem, N. C.
Burgoyne, Harvey J., Worcester
*Burke, Richard D., Jr., Worcester
Burleigh, John M., Augusta, Maine
Burton, Dorothea E., Buffalo, N. Y.
*Butler, Margaret M., Worcester
Butler, Mary E., Bolton
*Butler, Orton C., Millersburg, Ohio
Butler, Robert K., Worcester
*Butterfield, Ruth A., Westminster
Butterfield, Scott L., Jr., Worcester
Byron, Russell E., Oakfield, Maine

Callahan, Claire R., Worcester
*Cannon, Lois F., Worcester
*Carlson, Kenneth G., Worcester
Carlson, Martha J., Worcester
*Carnazza, Paul J., Worcester
Caron, Blanche E., East Millbury
Carr, Edwin F., Jr., Worcester
Carroll, Jabez F., Jr., Atlantic City, N. J.
*Carvalho, Vincent G., Worcester
*Catanese, Beverley A., Manchester, N. H.
*Catanzani, Charles J., Leominster
Chaberek, Stanley, Jr., Worcester
*Chadwick, Edwin H., Worcester
*Chang, Vivian C. H., Shanghai, China
Charamella, John L., Worcester
Chase, Arnold D., Worcester
Chen, Philip S., So. Lancaster
*Chicoine, Bernard P., Worcester
Chin, Philip S. T., Worcester
Chronis, Stanley J., Worcester
Ciani, Libro, Worcester
Ciborowski, Henry J., Worcester
Clauson, David R., Worcester
*Collins, Mildred E., Worcester
Collins, William, No. Brookfield
Comalli, Peter E., Jr., Lee
*Connolly, Paul J., Worcester
Conway, Edward H., Bronxville, N. Y.
*Cook, Mary E., Uxbridge
Coon, Edris M., Emmett, Idaho
Cooper, Ralph C., Jr., Worcester
Cordeiro, Joseph F., Worcester
Costrell, Edwin S., Detroit, Mich.
Cox, Evan R., Bangor, Maine
*Creveling, Harold F., Norman, Okla.
*Crickard, George E., Shrewsbury
*Crimmin, William F., Spencer
Cronin, Arthur F., Worcester
*Crowley, Eugene D., Worcester
Crowley, John J., Worcester
*Cutting, Sylvia G., Auburn

Dahlstrom, Arvid E., Worcester
Daniels, Richard C., Cherry Valley
Daviau, Donald G., Worcester
Davidson, Chester J., Worcester
*Davidson, Edward J., Worcester
*Day, Dorothy M., Waynesville, Ohio
Dean, John H., Pittsburgh, Pa.
Dean, Robert J., Binghamton, N. Y.
Deane, Mary L., Whitinsville
Dear, Walter C., Worcester
DeCosta, Robert E., So. Portland, Me.
Deebel, William R., Shenandoah, Pa.
Degermajian, George, Worcester
*DeJong, Donald H., Whitinsville
Desroches, Edward J., Southbridge
*DesRosiers, Lorraine T., Worcester
*Dickerman, Martha L., Spencer
Dimitroff, Olive I., Paul Smiths, N. Y.
DiRienzo, John C., Framingham
*Dolan, Donald V., Worcester
Dowd, Earl E., Worcester
Dowd, John F., Worcester
Dowgert, B. Stanley, Worcester
*Doyle, Henry M., Hudson
*Doyle, Mary M., North Brookfield
Doyle, Robert F., Worcester
*Ducharme, Estelle N., Worcester
Duffy, James J., Worcester
Dunn, James S., Worcester
Dunn, John J., Shrewsbury
*Dworkin, Robert S., Worcester
*Dwyer, Gary B., Northbridge
*Egan, Donald T., Worcester
Ekblaw, Elsa M., North Grafton
Eklund, William H., Worcester
Ela, Charles W., Worcester
Eliopulos, George N., Worcester
Ellis, Ralph W., Jr., Worcester
Emert, Martine, Fort Worth, Texas
Erdman, Donald E., Baltimore, Md.

Falk, Willy, Cairo, Egypt
Falko, John M., Worcester
Fallon, John E., Worceser
Feinberg, Howard N., Worcester
Feldman, Raphael M., Worcester
Field, Nancy S., Worcester
Finneran, William P., Jr., Worcester
Fisher, John C., Worcester
Fitzback, Henry M., Webster
FitzGerald, Paul R. Spencer
*Fitzmaurice, Henry F., Worcester
Flagg, Earle V., Worcester
Fleming, James S., Worcester
Fohlin, Patricia E., Worcester
Foley, John F., Fall River
Foley, Vincent D., Worcester
Ford, Kenneth S., Southbridge
Forzley, Leo B., Worcester
Fox, Robert W., West Springfield
Fraga, Louis M., Worcester
Frazier, Philip N., Worcester
*Frey, Helene E., Putnam, Conn.
*Frost, Albert E., Jr., East Douglas

Gallo, Louis C., Worcester
*Garbose, Samuel B., Gardner
Gauthier, Kenneth P., Shrewsbury
Gay, Frederick J., Jr., Worcester
Gewandter, Harold G., Worcester
Gibbs, Richard W., Worceser
Gibson, Stuart C., Grafton
Gifford, Raymond T., Jr., Worcester
Giles, Wesley R., Worcester
*Ginett, Lyndon E., St. Albans, Vt.
*Gleason, Mary J., Worcester
*Goddard, Esther C., Worcester
Goldberg, David H., Colchester, Conn.
Goldfaden, Allen R., Norwich, Conn.
*Goldstein, Arthur, Worcester
*Goodell, Robert P., Jr., Shrewsbury
*Gordon, Walter K., Brooklyn, N. Y.
*Grace, Louis B., North Brookfield
Graham, Russell A., Worcester
Granger, Wilfred R., Worcester
*Grant, Ann M., Worcester
Green, Howard L., Millburn, N. J.
Green, Ruth E., Worcester
Grove, Richard I., Worcester
*Gryncewicz, Albert H., Worcester
Gustafson, Russell J., Worcester
Guthrie, Joanne P., Toledo, Ohio

Haberman, Gilbert A., Longmeadow
*Hackett, Paul F., Worcester
*Haddad, Raymond A., Worcester
Haddad, Theodore A., Worcester
Haefner, Don P., Albany, N. Y.
*Hale, Richard S., Oxford
Hall, James S., Stamford, Conn.
Hamburger, Walter J., Jr., Dedham
Hanley, Edward A., Monson
*Hannah, John E., Webster
*Harris, Guy K., Lyons Falls, N. Y.
*Hart, Audrey J., Conway
Hayeck, Albert S., Worcester
Hayhow, Ernest H., Worcester
Healey, Frank H., Worcester
Hedenburg, Kenneth B., Worcester
Held, Colbert C., Clinton, Miss.
*Heller, Martin, Brooklyn, N. Y.
Helm, David A., Worcester
Hemenway, Paul C., Worcester
Hensas, Leonard K., Worcester
Hikel, Rudolph J., Waterville, Me.
*Hill, Nelson R., Worcester
Hill, William A., Columbia, Mo.
Hokans, Corlyn B., Worcester
Hokans, David H., Worcester
Holmstrom, Joan P., Worcester
*Howe, Carol, West Boylston
*Hulbert, Clifton H., Wilkinsonville
Hunsberger, Mary J., Middletown, Conn.
Hunt, Stanley W., Worcester

Iacobucci, Albert J., Clinton

Jackman, Albert H., Shrewsbury
*Jacobson, Arthur B., Worcester
*Jacobson, David B., Worcester
Jerome, Kathryn A., Worcester
*Jewell, Allan W., Webster
*Johnson, Betty E., East Millbury
Johnson, E. Luther, Worcester
Johnson, Robert E., Southbridge
Johnson, Sally E., Worcester
*Johnston, John M., Jr., Leicester
Johnston, Robert A., Jr., Worcester
Jones, James P., Lincoln, Nebraska
Jones, Richard I., Somerville
*Jordan, Robert L., Worcester

Kalil, Raymond, Worcester
Kallioniemi, Waino W., Worcester
Karvonen, John W., Shirley
*Kelley, Patrick T., Worcester
Kelly, James A., Jr., Shrewsbury
Kemp, James M., Worcester
*Kenneally, Joseph T., Worcester
Keyes, Robert J., Worcester
Kiewra, Stanley F., Worcester
*Kilcoyne, Leo F., Worcester
*King, Bettye M., Spencer
*King, David S., Sutton
*Klainer, Stanley M., Chestnut Hill
Klein, Adele S., Worcester
Kneeland, David J., Worcester
*Kneeland, Marion L., Worcester
Knox, Roy I., Leicester
Korzun, Sophiamarie R., Worcester
Krochalis, Anthony V., Worcester
Kubacki, Teresa C., Kearny, N. J.

Labenski, Therese M., Worcester
Laine, Oliver H., Harrisburg, Pa.
Lalor, Pierce C., Framingham
*Larkin, Alice B., Worcester
*Larson, Alden A., Shrewsbury
Leary, George A., Worcester
*Leavitt, Marion D., Worcester
Leavitt, Philip A., New York, N. Y.
LeClair, Edward E., Jr., Southbridge
Leclaire, Paul E., Oxford
*Lee, Harold J., New York, N. Y.
*Lee, James B., Worcester
Lekas, Mary D., Worcester
*Leonard, Ralph A., Worcester
Leonard, Robert M., Shrewsbury
Liberty, Kenneth E., Whitinsville
*Lilley, John R., II., Worcester
Lind, Willard H., Worcester
*Listewnik, Henry, Worcester
Lockhart, John, Worcester
Lonstein, Alfred I., Worcester

*MacAfee, Robert T., Worcester
MacCarthy, Ann K., Worcester
Macchi, Italo A., Worcester
MacGillivray, George C., Arlington
*Maddocks, Lewis I., Dudley
Magoun, Thomas, Worcester
*Mahoney, Joseph P., Worcester
Mainville, Joseph M., Rochdale
*Majeed, Abdul A., Baghdad, Iraq
Mann, June L., Turners Falls
*Marcus, Robert B., Pennington, N. J.
*Marsden, Ralph E., Jr., Worcester
*Martin, Eleanor, Marlboro
*Martin, Loraine Z., Holden
Martin, William B., Jr., Ashburnham
Martus, Joseph A., Worcester
Mason, Warren E., Worcester
*Mauke, Otto R., Webster
*Maxwell, James W., Worcester
*Mazzone, Thomas W., Worcester
McCauley, Donald F., Worcester
*McGinn, Philip W., Jr., Worcester
McGrath, Anna N., Marlboro
McLean, William A., Worcester
*McMahon, William D., Whitinsville
McMurtrie, John W., New York, N. Y.
*McNamara, Charles W., Worcester
McNulty, James M., Worcester
*McSherry, James C., Jr., Spencer
Mee, John C., Framingham
*Meinsen, George A., Hamden, Conn.
Mensoian, Michael G., Jr., Worcester
Merhib, Charles P., Worcester
*Mero, Esther B., Worcester
*Merritt, Cyril M., Worcester
Michaelian, Peter A., Worcester
Miller, Rex C., Washington, D. C.
Minasian, Minas, Worcester
Minasian, Vasken, Worcester
Mitchell, Richard P., Worcester
Mollo, Constantine D., Worcester
Mondore, Edward, Albany, N. Y.
*Monroe, Corinne, Worcester
Morello, Robert A., Worcester
*Morgan, Lewis W., New Canaan, Conn.
*Morin, Gerald J., Fisherville
Morse, Barbara J., Worcester
Moseley, William R., Worcester
*Mosher, William T., Duxbury
*Mossman, George C., Gardner
Muir, Jeanne V., Worcester
Murphy, Cornelius B., Worcester
*Murphy, Joseph M., Uxbridge
Murphy, Paul F., Worcester
*Murphy, William L., Worcester
Murray, Leroy J., Northampton
*Murray, Mary E., Worcester

Nelson, T. Leverett, Northboro
Nelson, Polly K., Adams Basin, N. Y.
Nelson, Roy S., Holden
*Niarchos, Constantine T., Pittsfield
*Niarchos, Peter T., Pittsfield
Nicholas, Virginia, Worcester
Nichols, Arthur W., Worcester
*Nichols, Frank, Philadelphia, Pa.
Nichols, Norton, Jr., Ontario, Calif.
Nimmo, John, Long Island City, N. Y.
*Nims, Robert F., Worcester
*Noone, James J., Worcester
*Nordstrom, Everett R., Dudley
Norman, Albert, Worcester
Norris, Lois J., Charlton
*Norton, James A., Jr., Worcester
*Norton, John E., Jr., Worcester
*Nugent, Edward F., Auburn

Obremski, Edward, Worcester
*O'Brien, Paul V., Jr., Wheelwright
O'Brien, Thomas F., Jr., Worcester
*Olund, Paul H., Worcester
Onorato, Nicholas L., Worcester
Orajaka, Stephen O., Middletown, Conn.
*Orleans, Agnes, Worcester
Orman, Sidney B., Worcester
O'Rourke, Richard T., So. Orange, N. J.
O'Toole, Charles S., Leominster
Ovian, Stephen, Worcester
*Ozimek, Henry A., Suffield, Conn.

Parker, Fred W., Worcester
Patrinos, Chris G., Clinton
*Philbin, Joseph A., Worcester
Phipps, Clarence R., W. Upton
Pierce, Frederick G., Worcester
Pincus, Jacob C., Brooklyn, N. Y.
*Plotczyk, Raymond A., Westboro
*Plotkin, Edward M., Worcester
Plourde, Roger P.. Worcester

Plue, Bradford B., Worcester
Plummer, Franklin P., Harrisburg, Pa.
Popielarczyk, Eugene A., Worcester
*Powell, Margaret R., Worcester
Proctor, Robert M., Worcester
*Prouty, Etta F., Shrewsbury
Prunier, Henry A., Worcester
*Putnam, Emmons Waldo, Jr., Worcester

*Quincy, Sally K., Ashburnham

Raffa, Romolo L., Worcester
Rassias, Charles N., Worcester
Rastelli, Lorenzo C., Waterbury, Conn.
Razzo, Clementine P., New York, N. Y.
Reddy, Martin M., New York, N. Y.
Reilly, Joseph L., Worcester
Retallick, Harold J., Eau Claire, Wis.
Reycroft, David G., Arlington
Ricciardi, Michael J., Worcester
Riggan, Byron W., E. St. Louis, Ill.
Rimbach, Francis, Jr., Sterling
*Rimbaud, Gilbert J., Worcester
*Rogers, Donald P., Hardwick
Rolston, Glenn E., Jr., Worcester
Rosenbaum, Joseph H., Lowell
Rosenberg, Alan L., Worcester
*Roy, Stanley A., Worcester
Russell, Henry N., Jr., Worcester

Sagerian, Mesack H., Worcester
*Salem, Emil J., Worcester
Salem, William J., Worcester
Sandberg, Richard P., Worcester
*Sanford, Frederick S., Ansonia, Conn.
Sanford, William W., Starrucca, Penn.
*Sarando, Lucy E., Worcester
Sardo, Peter T., Laureldale, Pa.
Sawyer, David E., Worcester
*Scanlan, John A., Barre
*Scannell, Mary C., Worcester
*Schwab, Donald G., West Sutton
Scott, Kenneth E., Webster
Seaver, Ralph A., Jr., Worcester
Shear, James A., Pittsburgh, Pa.
Sheehan, Francis P., Bridgeport, Conn.
Shenian, Popkin, Whitinsville
Sherman, George E., Worcester
Sibley, Edward A., Leicester
Sibley, William F., W. Springfield
Simmons, Clark W., Cooperstown, N. Y.
Simonian, Haig K., Worcester
*Simpson, Paul E., Worcester
*Sister Mary Clarissima, Philadelphia, Pa.
*Sister M. Gregoria, Philadelphia, Pa.
Skinner, Marguerite M., Worcester
*Slechta, Robert F., Worcester
Sleuman, Frank H., Jr., Worcester
*Sloan, James H., Worcester
Smith, Ann M., Worcester
*Smith, Arthur J., Worcester
Smith, Arthur W., Lynn
*Smith Lewis A., Worcester
Smith, Margaret A., Worcester
Smith, Raymond R., Westboro
Somers, Robert C., Worcester
Southwick, Albert B., Leicester
Sperry, Herbert S., W. Boxford
Squier, Dean F., Jamestown, N. Y.
*Stacey, Karl, Manhattan, Kansas
Starbird, Myron E., Farmington, Me.
Steadman, Wilfred A., Brookfield
*Steinberg, Morton, Worcester
Stevens, Donald E., Branford, Conn.
Stewart, Milton, Worcester
*Stylos, Harry, Lowell
Sullivan, Edward P., Worcester
*Sullivan, Elinor B., Worcester
Svenson, David A., Worcester
Swana, Michael R., Dudley
Swanstrom, Kenneth E., Worcester
*Swenson, Richard W., Worcester
*Swenson, Katherine R., Worcester
Symonds, Merrill A., Worcester
Symonowicz, Alfred M., Worcester

*Theodore, Louise, Worcester
Thomas, Edward S., Worcester
*Tibbetts, Raymond E., Worcester
Tisdell, Robert J., Shrewsbury
Tomolonis, Albert J., Worcester
Tonseth, Rolf S., Marlboro, N. H.
*Toomey, Harry L., Worcester
Trow, Warren F., Sterling
Trussell, Barbara, Worcester
Turner, Albert B., No. Brookfield
*Tuttle, Jean W., Worcester
Tyborowski, Joseph J., Worcester

Ullstrom, Paul E., Worcester

Vander Pyl, Adrian W., Rutland
Vienneau, Gerald J., Worcester
Virchow, William R., Needham

Wahlberg, Bertil L., Spencer
*Waldron, Chauncey W., Jr., Newtonville
*Washburn, Paul C., Worcester
*Waters, Richard, Gardner
*Weaver, Miles W., Spencer
*Wells, Walter E., Worcester
*West, Franklin F., Millville, N. J.
Wetherbee, David K., Worcester
White, David E., Southbridge
Wiegand, Dudley W., Worcester
Williams, Malcolm, Worcester
*Wilson, Martin C., Worcester
*Wilson, Nancy D., Worcester
Woessner, Russell H., Clinton
Woo, David Y. C., Shanghai, China
Woods, John F., Worcester
Woolson, Gloria D., Worcester
*Wright, Helen L., Worcester
Wynne, William M., Manchester

Yorkston, Doreen M., New Westminster, B. C.
*Young, Manoog S., Brookline

Zawalick, Theodore E., Worcester
Zukowski, Walter H., Worcester
Zukowsky, Raymond J., Worcester

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Bernstein, William Elliott	52
Berry, Ann Dorothy	53
Demers, Frederick Anatole	53
Hovagimian, Aram Joseph	53
Karvonen, John Waldo	50
Krecioch, Eugene Robert	51
Leary, George Austin	52
Macomber, William Bernard	Ps g
Pryor, Robert Edward	51
Rowland, Christopher W.	G g
Scott, Carl Eric	52
Soderberg, Roy Erik	53

SUMMARY 1949-50

			Men	Women	Total
Undergraduates			630	229	859
	Men	Women			
Freshmen	120	65			
Sophomores	175	50			
Juniors	177	54			
Seniors	158	60			
Graduate Students			162	30	192
Special Students			24	11	35
Summer Term (1949)			427	96	523
Total			1243	366	1609
Less Duplications			208	40	248
Net Total			1035	326	1361
Auditor				1	1
			1035	327	1362

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Inquiry Blank

Correspondence should be addressed as follows:

Regarding admission to the college or to the summer term or as a special student, to the Dean of the College.

Regarding admission to the graduate school, to the chairman of the department in which the applicant is interested.

Applications should be filed as early as possible. *Unduly late applications may fail to receive consideration.*

Applications for admission should, so far as is possible, be filed at the end of the junior year and at the latest before March 1 of the senior year.

CLARK UNIVERSITY

WORCESTER 3, MASSACHUSETTS

REQUEST FOR "APPLICATION FOR ADMISSION" BLANKS

Name ....
(Last name) (First name) (Middle name)

Mail address ....

....

....

I am interested in admission to (please check below):

The men's college ....

The women's college ....

The graduate school ....

I am particularly interested in the department or division of:

....

I should like to enter (date) ....

Date of this application ....

CLARK UNIVERSITY

Commencement Week

PROGRAM

1950

WEDNESDAY MAY THIRTY FIRST

Senior Class Banquet Edgemere Lodge	7:30 P M

THURSDAY JUNE FIRST

Senior Promenade Wachusett Country Club	9 - 1

FRIDAY JUNE SECOND

Senior Class Picnic Scandinavian Athletic Club Park	2 - 12
Alumni Council Lounge Room Alumni Gymnasium	4 P M

SATURDAY JUNE THIRD

Alumni Day

Annual Meeting Alumni Association Lounge Room Alumni Gymnasium	10 A M
Alumni Luncheon Alumni Gymnasium	12:30 P M
Reception to Alumni, Faculty, and their Families at the home of President and Mrs. Jefferson	4 - 6 P M
Alumni Reunion Class Dinners	6:30 P M
Class Day Exercises Atwood Hall	8 P M

SUNDAY JUNE FOURTH

Baccalaureate Services 10 A M
Atwood Hall
Address by
The Reverend Liston Pope
Dean of Yale Divinity School
New Haven, Connecticut

Commencement Exercises 3 P M
Worcester Memorial Auditorium
Address by
Alvin Christian Eurich
President of the State University
of New York

Following Commencement Exercises President and Mrs. Jefferson will hold a reception at their home for the faculty, graduates, and guests

Admission to the Commencement Exercises is by ticket only

Reservations for the Alumni luncheon should be made through the Alumni Office before Monday, May twenty-ninth Tickets are $2.00 (tax included)

The Classes of 1905, 1910, 1915, 1920, 1925, 1930, 1935, 1940, 1945 and 1949 will hold special reunions

CLARK UNIVERSITY

BACCALAUREATE SERVICES

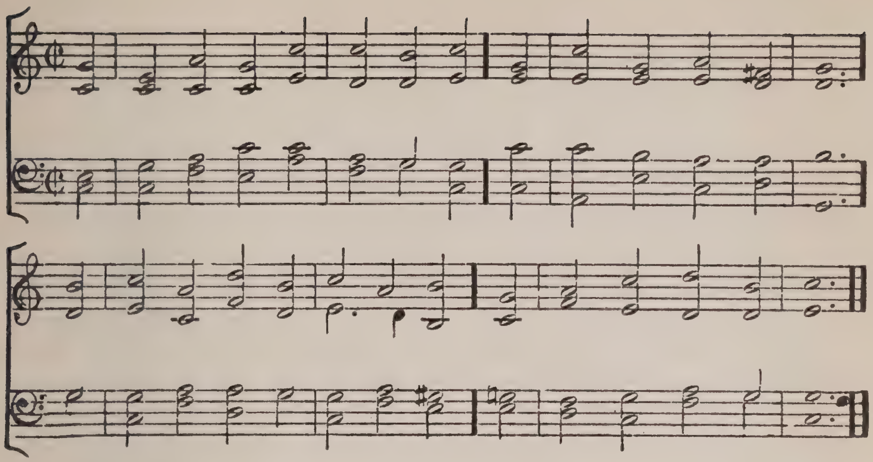
In Atwood Hall

June Fourth, Nineteen Hundred and Fifty

At Ten O'Clock

PROGRAM

PRELUDE	
Three Chorale-Preludes Jesu, meine Freude Lobt Gott, allzugleich Gelobet seist du, Jesu Christ	*Bach*
PROCESSIONAL	
Allegro from Sixteenth Concerto	*Händel*
INVOCATION	President Howard B. Jefferson
SCRIPTURE READING Luke 12:16-21, 48b	President Howard B. Jefferson
HYMN—St. Anne	
SERMON "To Whom Much is Given"	The Reverend Liston Pope Dean of Yale Divinity School
HYMN—Old Hundredth	
BENEDICTION	The Reverend Liston Pope
RECESSIONAL	
Trumpet Tune	*Purcell*



ST. ANNE C.M.

O God, our help in ages past,
  Our hope for time to come,
Our shelter from the stormy blast,
  And our eternal home.

Before the hills in order stood,
  Or earth received her frame,
From everlasting Thou art God,
  To endless years the same.

Under the shadow of Thy throne
  Thy saints have dwelt secure;
Sufficient is Thine arm alone,
  And our defense is sure.

A thousand ages in Thy sight
  Are like an ev'ning gone;
Short as the watch that ends the night.
  Before the rising sun.

O God, our help in ages past,
  Our help for time to come,
Thou art our guide while ages last,
  And our eternal home.

Isaac Watts

(St. Anne is taken from the famous "Worcester Collection," printed in this city by Isaiah Thomas in 1786)

OLD HUNDREDTH L.M.

Be Thou, O God, exalted high,
  And as Thy glory fills the sky,
So let it be on earth displayed,
  Till Thou are here and now obeyed.

(Old Hundredth is the only hymn popularly surviving today from the "Bay Psalm Book," the first book printed in America, at Cambridge in 1640)

Organist: Professor H. Earle Johnson

The audience is requested to stand while the procession leaves the hall

CLARK UNIVERSITY

Sixtieth Annual Commencement

JUNE 4, 1950

WORCESTER, MASSACHUSETTS

Order of Exercises

Processional
Trumpet Voluntary — *Henry Purcell*
March from "Occasional Oratorio" — *G. F. Händel*

Invocation — THE REVEREND JOHN BRYANT OLDS, '31
Pastor of First Methodist Church
Somerville, Massachusetts

Announcements by the President

Commencement Address — ALVIN CHRISTIAN EURICH
President of the State University
of New York

Conferring of Degrees

Benediction — THE REVEREND JOHN BRYANT OLDS

Recessional
Maestoso from Third Organ Sonata — *Felix Mendelssohn*

The audience will kindly remain standing during the recessional

Candidates for the Degree of Bachelor of Business Administration

Charles Raymond Aldrich
Donald Alexander Banks
John George Bastille
Joseph Omar Berthiaume
Torsten Allen Carlson
John Laurence Charamella
Harold Ray Chesson, Jr
George Dana DiRado
William Henry Eklund
John Michael Falko
Brent Triest Farrand
Henry Marcel Fitzback
Vincent Donnell Foley
Mary Kathleen Fontaine
Philip North Frazier
Frederick John Gay, Jr
Robert Proctor Goodell, Jr
Richard Henry Graham
Richard Irving Grove
Kenneth Bruce Hedenburg
John MacKenzie Johnston, Jr
Beatrice Yolande LeBlanc
Joseph Peter Mahoney
Donald Frederick McCauley
Edward Mondore
Constantine Thomas Niarchos
Edward Obremski
Charles Pappas
Albert George Phillips, Jr
Clarence Ray Phipps
Joseph Eugene Polastri
Glenn Everett Rolston, Jr
Henry Nelson Russell, Jr
Emil John Salem
Loukia Smaragda Sarando
Joel Hayden Sirk
Delwin Frank Smith
Harry Irving Spencer
Milton Stewart
Irving Louis Supovitz
Robert Tyler Tillson
William Robert Tothill
Roger Temple Westcott
Richard Anthony Xenos
Raymond John Zukowsky

Candidates for the Degree of Bachelor of Business Administration with Honor

Martin Goldman *with Honor in General Course and with Honors in Business Administration*

Warren Keith Heckman *with Honors in Business Administration*
James Anthony Kelly, Jr., with Honor in General Course
Kenneth Edwin Swanstrom *with Honor in General Course and with Honors in Business Administration*

George Francis Walker, Jr. *with Honor in General Course*

Candidates for the Degree of Bachelor of Arts

May Ingrid Allstrom
Dario Mario Ambrosini
Carol Theresa Amsden
Virginia Rita Amsden
Charles Oscar Anderson, Jr
Janet Marie Anderson
Jean Harriet Anderson
Roger Burnett Anderson
Margaret Mary Ash
Margery Jane Asher
Eileen Barnett
George Milton Berg
George Bondra
William Joseph Brown
Charles Stephen Burke
Martha Jane Carlson
Blanche Ellen Caron
Henry Joseph Ciborowski
Howard Leslie Clark
Stanley Francis Clement
Jerry Joseph Cocchiola
Mary Elaine Cook
Marie Frances Courtney
Ernest Oriente Cuccaro
Fernand Joseph Daneault
Carl James Davis, Jr
George Herbert Davis, Jr
Mary Louise Deane
Walter Ching Dear
Alice Katz Dember
Robert Edward Dik
John Carl DiRienzo
Robert Crane Divoll
Edwin Peter Dow
Thomas Duncan
John Joseph Dunn
Ralph Warner Ellis, Jr
Marie Frances Fleming
Patricia Edwards Fohlin
Ralph Lawrence Gates
Clifford Clyde Gay
Lillian Louise Gendron
George Edward Gillson
Mary Angela Giobellina
Julius Sherman Gold
David Harold Goldberg
Allen Robert Goldfaden
Edward Martin Goldstein
Walter Kelly Gordon
Harold Ragnar Graden
Russell Arthur Graham
Barton Haigh
Pearl Haroian
Nancy Chandler Haskins
Herbert Arthur Haworth
Sharkey Heroian
Walter Braxton Hicks
Nancy Marie Higgins
Elizabeth Hilborn
Jeanne Day Hill
David Hamlin Hokans
Harriet Lucia Holdroyd
Samuel Horowitz
Mary Jane Hunsberger
Myrna Belle Jasen
Milton Henry Javery
Emil Luther Johnson
Robert Earl Johnson
Louis Allman Jones
George Warren Justice, Jr
Harry Kachadorian
Eli Kalil

Candidates for the Degree of Bachelor of Arts (Cont.)

Raymond Kalil
Betty Mary Kemp
Robert James Keyes
Edna Elizabeth Kowal
Marjorie Roth Lamport
George Laska
Marie Ernestine Lemire
Geoffrey Wendell Lennan
Robert Martin Leonard
John Charles Leslie
Kenneth Earl Liberty
John Robert Lilley, II
Marjorie Christine Lindberg
Dolores Maria Manzi
Lucian Arthur Manzi
Anita Marsoopian
Raymond Joseph Martel
Rocci Stephen Mastroberti
Anne Regine Mazur
Vincent Stanley Mikoloski, Jr
Constantine D. Mollo
Jeanne Viola Muir
Paul Florence Murphy
Arthur Wilder Nichols, Jr
Emile Francis Nolin
John Ernest Norton, Jr
Lawrence Stephen O'Connor, Jr
Sidney Bernard Orman
Charles Stuart O'Toole, Jr
John James Owens, Jr
Islay Isabelle Palmer
~~Charles Pappas~~
Shirley Twiss Perkins
Barbara Ruth Piper
Franklin Pierce Plummer, III
Marjorie June Porton
Robert Merton Proctor
Romolo Louis Raffa
Robert Eugene Riemenschneider
Marc Sheldon Rubin
Phyllis Muriel Sadick
Richard Paul Sandberg
Joseph Robert Selzo
Popkin Shenian
William Andrew Sherman
Paul Anthony Shiminski
William Frederick Sibley
Marguerite MacPherson Skinner
Paul Robert Skogstrom
Ann Marie Smith
Arthur Wallace Smith
Barbara Arlene Soderberg
Janet Sharp Sokoloff
Richard George Spaunburgh
Herbert Stephen Sperry
Dean Firth Squier
Russell Herbert Stanhope
Donald Eberhardt Stevens
Dolena Elizabeth Streeter
Walter Robert Strickland
Thomas Charles Sturtevant
John Joseph Sullivan
Michael Richard Swana
Arline May Tillotson
Warren Frank Trow
Barbara Trussell
Harold Earl Vickers, Jr
Gerald Joseph Vienneau
Joanne Patricia Vradenburg
Elaine Washburn
Ervin Eldred Weagle
Jacquelyn True Wells
Walter Edward Wells
David Kenneth Wetherbee
Dudley Wheeler Wiegand
Gloria Dolores Woolson
Melvin Hersh Worth, Jr
Andrew John Zaharatos

Candidates for the Degree of Bachelor of Arts with Honor

William Melvin Capen *with Honors in Romance Languages*

Robert Bruce Carlisle *with Honors in History and International Relations*

Donald George Daviau *with Honor in General Course and with Honors in German*

Mary Agnes Doran *with Honor in General Course*

Mary June Gallagher *with Honor in General Course and with Honors in History and International Relations*

George Wilson Grader, Jr. *with Honor in General Course*

Kenneth William Gunther *with Honor in General Course*

Theodore Abraham Haddad *with Honor in General Course*

~~James Anthony Kelly, Jr. *with Honor in General Cou*~~*rse*

Sophiamarie Roberta Korzun *with Honor in General Course*

Janice Evelyn Lurier *with Honors in Psychology*

Beatrice Loretta Neary *with Honor in General Course and with Honors in Economics and Sociology*

Adrian Weston Vander Pyl *with Honors in Geography*

Miles Waverly Weaver *with Honor in General Course*

Candidates for the Degree of Bachelor of Arts with High Honor

Gerald Philip Loweth *with High Honor in General Course and with Honors in Psychology*

Robert William Martel *with High Honor in General Course*

Leonard R. Weisberg *with High Honor in General Course and with Honors in Physics*

Candidates for the Degree of Bachelor of Arts with Highest Honor

Symme Hilda Burstein *with Highest Honor in General Course*

Raymond John Caefer *with Highest Honor in General Course and with Honors in Romance Languages*

Candidates for the Degree of Bachelor of Arts with Highest Honor (Cont.)

Edward Hartnett Conway *with Highest Honor in General Course*

Benedict Oliver Olson *with Highest Honor in General Course and with Honors in Physics*

Kenneth Shulman *with Highest Honor in General Course*

Candidates for the Degree of Master of Arts in Education

Evelyn Marie Adams
Richard Francis Adrian
Doris Gertrude Audette
Harriet Brooks
Richard Diggins Burke, Jr
Mildred Edith Collins
Vincent Roger Faucher
Kathryn Ann Jerome
James Myron Johnson
David John Kneeland
James Joseph Noone
Lauri Olavi Oravainen
Leonard Alexander Ostlund
James Horace Sloan
Roger George Viens
William Richard Virchow
Malcolm Williams

Candidates for the Degree of Master of Arts

Biology

Italo Alden Macchi
David Shepro

Chemistry

Anna Mae Martin
Kenneth Albert Sund

Economics and Sociology

Ali Ardehali
Charles Waldo Ela
Richard Maxwell Ireland
John Atwood Ross Macdonald
George Ferno MacDowell
Richard William Reed
David William Rees

Geography

Siddik Abdul Rahman Atrushi
Mildred Berman
Richard Lorey Day
Willard Carl Hessen
Lenore Marie Kelly
Pierce Christopher Lalor
Abdul Amir Majeed
Norton Nichols, Jr
Lawrence Edward Randall
Edward Abbott Sibley
James Elmon Vance, Jr
William Arthur Rudolph Wikkramatileke

Candidates for the Degree of Master of Arts (Cont.)

History and International Relations

Walter Hillman Butler, Jr
Frank William Thornton

Psychology

Mary Haroian
Bernard Kaplan
Bernard Mirin
Ricardo Bernard Morant
Robert Harvey Pollack

Candidates for the Degree of Doctor of Philosophy

Chemistry

Bernard Baum
Joseph Hans Rosenbaum

Geography

Mohamed Fateh Akiel Hebrawi
Mohamed Bahy El-Din El-Hefny
Ma Thin Kyi
Harold James Retallick
Elvyn Arthur Stoneman

History and International Relations

Roberta Schoenland Sigel

Psychology

Austin West Berkeley
Paul R. Dingman
Howard Friedman
Dorian Mabyl Rose
Esther Kroop Sarason
Roy Schafer

Conferring of Honorary Degrees

Loring Holmes Dodd	Presented by Robert Stanley Illingworth
Alvin Christian Eurich	Presented by Samuel Jacob Brandenburg
Charles Bungay Fawcett	Presented by Samuel Van Valkenburg

PRENTISS HOYT PRIZE IN POETRY

Anna N. McGrath for her Poem "Finite Verb, Four Moods"

WELLS BINDERY
WALTHAM, MASS.
FEB. 1951